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ABSTRACT

A study examined the rates of and reasons for students leaving New Hampshire summer vocational programs and identified models that could be implemented to reduce attrition over the summer in these vocational programs. After examining 1981 enrollment data pertaining to New Hampshire regional center vocational program leavers, researchers determined that of the entire group of vocational program leavers 7 percent failed to attend for the second year of the program. Seventy-six percent of the 144 students not returning to a vocational program were interviewed. Of these, 41 percent are now enrolled in academic programs, 35 percent are enrolled in new vocational courses, and 19 percent have left school. Next, researchers conducted a model-building workshop to reduce the potential of generalizing the study results. Emerging from the workshop were the following three models: a predictive instrument for the early identification of program leavers, a model to provide occupational and career information to potential vocational students about specific vocational opportunities, and a model to reduce attrition between school years for students who have completed the first year of a vocational program. Recommendations called for implementation of the three models and for further followup studies. (MN)

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FACTORS AFFECTING VOCATIONAL PROGRAM LEAVERS IN NEW HAMPSHIRE

Contract #08602

July, 1982

Prepared for The Department of Education
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I. EXECUTIVE SUMMARY

Factors Effecting Vocational Program Leavers in New Hampshire

In the past thirty years, research on school dropouts has focused upon students who leave programs during the academic school year. A preponderance of research and data exists during this time frame. National information collected by the U.S. Census Bureau and the U.S. Department of Education indicate that seventy-five percent (75%) of American nineteen-year-olds are high school graduates. Stated another way, twenty-five percent (25%) of the nineteen-year-olds never completed high school or they dropped out or left school. A number of states disguise their dropout rates by reporting these rates in a variety of methods which lead the reader to an inaccurate conclusion. That conclusion being that the average dropout rate is only ten percent (10%) or less. This is true for one year; however, it takes four years to graduate. Therefore, any figure which represents a dropout rate for one year needs to be extended over a four year period to extract a true dropout picture. Beyond these numbers of dropouts, another group of students exists who are not recorded in any national or local data. These are students who drop out over the summer. These students are not included in New Hampshire dropout data because they don't drop out during the academic school year. Percentage wise, approximately the same number of students drop out over the summer as drop out over the academic year.

The purposes of this research study were to examine: (1) the rates and reasons of summer program leavers in vocational programs; and (2) identify models which could be implemented to reduce attrition over the summer in these vocational programs.

TABLE 1.

Regional Center Vocational Program School Year Leavers:
Withdrawals, Transfers, and Students Failing to Re-Enroll, 1981

Regional center	Vocational enrollment	Program Leavers **Withdrawals #	**Withdrawals %	***Transfers #	***Transfers %	Number of students failing to re-enroll	Percent of total enrollment failing to re-enroll	Percent of total enrollment as program leavers and students failing to re-enroll
01 Colebrook	127	8	6.3	6	4.7	4	3.2	14.2
****02 Berlin	410	25	6.1	21	5.1	27	6.6	17.8
03 Littleton	104	3	2.9	18	17.3	12	11.5	31.7
03 Whitefield	262	12	4.6	24	9.2	22	8.4	22.2
****05 Plymouth	188	11	5.9	47	25.0	17	9.0	39.9
06 Conway	152	9	5.9	20	13.2	20	13.2	32.3
07 Lebanon	97	6	6.2	0	0.0	4	4.1	10.3
08 Laconia	235	45	19.1	14	6.0	17	7.2	32.3
09 Wolfeboro	112	4	3.6	19	17.0	5	4.5	25.1
10 Claremont	331	18	5.4	9	2.7	31	9.4	17.5
11 Concord	544	73	13.4	41	7.5	19	3.5	24.4
****12 Somersworth	298	46	15.4	21	7.0	13	4.4	26.8
****13 Keene	689	25	3.6	66	9.6	55	8.0	21.2
14 Peterborough	159	17	10.7	10	6.3	19	11.9	28.9
15 Manchester	913	65	7.1	99	10.8	*	*	17.9
16 Nashua	853	69	8.1	59	6.9	77	9.0	24.0
17 Salem	453	59	13.0	72	15.9	14	3.1	32.0
****18 Exeter	585	32	5.5	56	9.6	31	5.3	20.4
19 Portsmouth	432	64	14.8	60	13.9	43	10.0	38.7
20 Dover	603	51	8.5	47	7.8	68	11.3	27.6
State totals*	11,385	917	8.1	1,136	9.9	790	6.9	24.9

*Totals presented are statewide totals and are not regional totals.

**Withdrawals include: 1) Unsatisfactory performance, 2) Economic reasons, 3) Entered armed forces, 4) Personal problems, and 5) Reasons unknown.

***Transfers include: 1) To another vocational program, 2) To an academic or basic studies program, and 3) To another school.

****Regional vocational centers volunteering for study.

The rates of vocational program leavers are indicated on Table I for New Hampshire vocational centers. These figures are based upon students who completed the first year of a vocational program according to the New Hampshire Department of Vocational Education Management Information System. These same students then chose to continue on in the second year of the vocational program by pre-registering during spring registration. However, these students never participated in the fall during the second year of the vocational program. From within this group of program leavers, seven percent (7%) failed to attend for the second year of the vocational program. Twenty-three percent (23%) of the total program leavers during the academic year have been identified as disadvantaged or handicapped. Using the total enrollment figures for special populations, the percentage figures are actually much higher (see Table III). Immediately, the point must be clearly made that this is not the weakness of Individual Education Plans or Individual Vocational Education Plans. This statement must be understood because in New Hampshire most vocational programs are offered at the junior and senior level. At this time, intervention is required to assist the student in gaining meaningful entry-level employment skills prior to graduation.

After establishing the rates of program leavers, five vocational centers volunteered (see Table I) to allow interviews with students who had left the original vocational program after one year. They pre-registered for, but chose not to attend, the second year of the vocational program. In order to conduct these interviews, an extensive national review of the literature was conducted and then a panel of New Hampshire educators validated the questions prior to the actual interviews of the students. The interview format was derived from a suicide model adapted by John P. Bean. The rationale for such a model is straightforward; that is, dropping out of

TABLE 3.

Handicapped, Academically Disadvantaged and Economically Disadvantaged Program Leavers: Reason for Termination 1981

Termination reasons	Number of program leavers	Percent of total enrollment leaving programs	Number of handicapped students leaving programs	Percent of handicapped students leaving programs	Number of academically disadvantaged students leaving programs	Percent of academically disadvantaged students leaving programs	Number of economically disadvantaged students leaving programs	Percent of economically disadvantaged students leaving programs
Transferred--to another vocational program	351	3.1	42	6.8	22	4.1	8	2.2
Transferred--to the academic or basic studies program	600	5.3	22	3.5	17	3.1	8	2.2
Transferred--to another school	186	1.6	40	6.4	21	3.9	27	7.4
Withdrew--unsatisfactory performance	295	2.6	19	3.1	29	5.4	12	3.3
Withdrew--economic reasons	52	.4	2	.3	5	.9	20	5.5
Withdrew--entered armed forces	23	.2	2	.3	3	.6	1	.3
Withdrew--personal reasons	259	2.3	17	2.7	17	3.1	13	3.6
Withdrew--reasons unknown	287	2.5	13	2.1	46	8.5	64	17.6
Total program leavers	2,053	18.0	157	25.2	160	29.6	153	42.1

school is a form of "social suicide." This social suicide model also allowed us to categorize questions in the interviews into four areas: background variables, environmental variables, attitude and outcome variables, and organizational variables.

A total number of one hundred and forty-four students (144) were eligible to be interviewed for this study. The major findings are as follows, based upon the students who were identified by the Division of Vocational-Technical Education, Research and Coordinating Unit.

- 76% of the students were followed-up and contacted directly for an interview
- 41% of the students interviewed are now enrolled in academic programs only
- 35% of the students interviewed are currently enrolled in new vocational courses
- 19% of the students identified have left school
- 3% of the students surveyed had moved
- 1% of the students surveyed are deceased
- 1% of the students surveyed are married
- 1% of the students surveyed are in the military

Because of having followed-up with only six percent (6%) of the students who left a vocational program last year (1981), caution must be given to generalizing the results of the survey. To reduce the potential of generalizing the results, a model-building workshop was conducted. Each vocational center sent two participants from their center to work with the research team to develop three models which could help prevent and/or reduce attrition in the future. A copy of the agenda, proceedings, and workshop evaluations can be found in Section III of the final report. As a result of this model-building workshop, three tentative models emerged.

1. The development of a predictive instrument for the early identification of program leavers.

2. The development of a model to provide occupational and career information to potential vocational students about specific vocational opportunities.
3. The development of a model to reduce attrition between school years for students who have completed the first year of a vocational program.

The assumptions, strategies, and outcomes of this model-building workshop begin to develop some parameters for a clearer understanding of the problem at hand. However, three steps or courses of action can and should be implemented to attempt to reduce attrition in vocational programs. They are:

1. The identification of additional vocational programs (center or non-center sites) which will participate in the interview process. This will increase the understanding of the reasons for program leavers. A "social suicide" model has been developed based upon a national literature review and has a computer program to codify and perform certain statistical analyses on the responses of those interviewed.

2. The implementation of the three models to reduce attrition by (a) early identification of potential program leavers, (b) to provide occupational and career information and outcomes to potential vocational enrollees and (c) to test various methods on assessment of a student's vocational choice as a result of the completion of the first year of his vocational program.

3. To establish at the outset of these recommendations a four-year longitudinal follow-up study to determine the appropriateness of the first two recommendations. This longitudinal study would have a control and treatment group to compare the impact of reducing attrition in the vocational programs.

II. OVERVIEW OF GOALS AND OBJECTIVES OF THE PROJECT

Overview:

This research project is designed to examine and identify, through the literature and then through personal interivews, the factors which cause students to terminate their participation in Regional Vocational Programs. After personal interviews, a factor analysis will be conducted to determine if there is a common factor which is contributing significantly to students' decision to terminate their participation in Regional Vocational Programs. Finally, with the assistance of vocational educators in New Hampshire, a model(s) will be developed which could be implemented in the future to reduce the termination of students who do not complete the Regional Vocational Programs.

Objectives:

1. To examine the literature and determine the reasons why students complete only one year of a two-year sequential vocational program. Furthermore, through the literature review an analysis of successful methods for reducing attrition will be carefully examined and synthesized for use in New Hampshire.
2. To examine, through personal interviews with dropouts at five Regional Vocational Centers, the reasons which caused students to terminate their participation in a program.

Procedures and Contributions:

This research project is designed to examine through the literature and then through personal interview the factors which cause students to terminate their participation in regional programs. After the personal interviews, a factor analysis will be conducted to determine the common factors contributing to students' terminating their participation.

Finally, with the assistance of vocational educators in New Hampshire, a model(s) will be developed which could be implemented in the future to reduce student dropout. This model will be developed as a result of the combination of the successful methods in the literature and the factors affecting school dropouts between the first year and second year of the vocational program.

Participants in the Research:

In each Regional Vocational Center, initial contact will be made through the regional vocational director and then through the chain of command starting with the superintendent in both sending and receiving schools. Proper protocol is an important step in developing cooperation and participation.

The next group of participants will be those students who are no longer enrolled in a regional vocational program. Each student who has terminated his or her enrollment will participate in a personal interview. The purpose of the interview will be to examine the factors, reasons, or causes which led up to or caused the student to drop out of the Regional Vocational Program prior to the completion of his or her program (see Expected Results).

The third group of participants will be the Division of Vocational-Technical Education personnel. Their role will be to provide data and information concerning the program standards. We believe the quality of a vocational program may directly effect the students' success or termination in a vocational program. That information will be analyzed for each program which has had a student terminate his involvement in that vocational program.

And, lastly, a group of local vocational personnel from the Regional Vocational Centers will be involved in the development of the model(s) to help reduce the number of students who drop out of programs between school years.

Expected Contributions to Vocational Education:

The product of this research may yield the following:

1. Provide current information on the characteristics of students in New Hampshire who do not complete vocational programs.
2. Provide current information on the programs that have the highest and lowest retention rate of between-school-year drop outs.
3. Develop models, with the assistance of representatives from the five centers, that could increase the retention of vocational students throughout the two-year sequence (models may differ according to school size and number of sending schools).
4. Determine if IEPs and IVEPs are being implemented as well as helping handicapped and disadvantaged students remain and succeed in vocational programs.
5. Provide a current literature review as to approaches that are most effective in reducing between-school-year attrition.
6. Provide information on the degree of career education students received prior to enrolling in vocational programs.
7. Provide information on the number of between-school-year dropouts at five regional vocational centers and the reasons that contributed to the attrition rate (i.e., transportation, family support, scheduling, peer pressure, economic considerations, program options, etc.).

8. Provide a model for vocational centers to analyze through a discrepancy evaluation model their success in retaining students who might otherwise have dropped out.

9. Provide recommendations that can be implemented to reduce future summer attrition in vocational programs.

Plan of Action:

GOAL 1: Review the current literature as to approaches (and their success) to determine the numbers of students dropping out and the reasons for such dropping out, what those numbers and reasons are, and the methods that have been implemented (and their success) in reducing youth attrition.

1.1 One month from the date of agreement of the contract a national literature search would be completed and filed by category in notebook form for easy access. This literature search would encompass the review of literature from:

- Educational Retrieval Information Center
- National Diffusion Network
- CETA Research
- The National Center for Vocational-Technical Education
- Director for Research and Evaluation at State Department of Vocational Education
- Institutions of Higher Education Active in Teacher Training in Vocational Education
- National School Board Association
- National Advisory Council of Vocational Education
- American Vocational Association Headquarters
- Council on Exceptional Children
- National School Administration Council
- Kellogg Fellowship Group II
- CIJE

1.2 One month from the acceptance of this contract, a notebook will be developed stating, by program, the national numbers of students who have dropped out of vocational progams.

1.3 At that same time, a second section of the notebook will identify the reasons for students dropping out.

1.4 The third section of the notebook will identify the frequency of the reasons which cause students to drop out.

1.5 Lastly, the fourth section will identify successful implementation methods based on reasons for dropping out of vocational programs.

As a result of the above four steps, recommendations can be made to reduce future summer attrition. These recommendations can be validated and supported through the development of a New Hampshire profile of reasons, numbers, and suggested methods to reduce drop outs.

GOAL 2: Determine the number of between-school-year dropouts and the reasons for such dropouts at Regional Vocational Centers in New Hampshire. The academic years selected are 1980-81 and 1981-82. The five Regional Vocational Centers have been identified by the RCU.

2.1 One month from the date of agreement of the acceptance of this contract, a dropout chart will be completed and validated stating by center and by program the number of students who will be interviewed.

2.2 Three months from the date of the contract, personal interviews will be completed at the five Regional Vocational Centers with an anticipated range of 90-100 students who dropped out of vocational programs.

2.3 Four months from the date of agreement of the contract, all computer analysis will be completed. This analysis will identify factors which contribute to dropouts as well as answering some of the questions stated in the Expected Results and Impact of Vocational Education.

2.4 Five months from the date of agreement of the contract, a model(s) will be developed by personnel active in vocational education in New Hampshire. This model will be developed in a one-day workshop in the spring. The model will be for the purpose of future study of dropouts.

2.5 Six months from the date of the agreement of the contract or prior to June 30, 1982, a final report will be submitted to the Research and Coordinating Unit. This will include all computer runs, notebook and survey instruments, and model(s) developed.

A. An oral report will be made to the DVTE Staff and Vocational Director in New Hampshire prior to submission of final report.

B. Five copies (5) of the final report will be submitted and one copy of supporting data and or material will be provided.

III. REVIEW OF THE LITERATURE

Characteristics and Reasons for Dropping Out

General View - The Secondary Dropout

A vast amount of research in the last 30 years has concentrated on the group commonly referred to as dropouts. In nearly all the studies reviewed, the dropout is defined as "a person, grades 7-12, who leaves school before graduating and who does not transfer to another school or accredited institution and who does not enter the military service" (Fox and Elder, 1980). This particular research project focus was on vocational summer dropouts, but the enormous quantity of information on the "generic" dropout aided in the development of the instrument and design of this study. Ignoring this group would not do justice to the magnitude of the problem facing education in this country.

An examination of the literature reveals some insights into the population who are most likely to be dropouts. Surprisingly, the potential dropout turns out to be someone who could be identified with a reasonable degree of accuracy by the sixth grade (Fox and Elder, 1980). Dr. Ken Hoyt, Director of Career Education at the U.S. Department of Education, in a recent presentation to New Hampshire Vocational Educators, suggested that identification of future dropouts could be accomplished at the fourth grade level (Hoyt, 1981). The literature search consistently documents the need for early identification and intervention. It is almost impossible to dissuade a student who is almost 16 and has verbalized his/her intentions to drop out (Fox and Elder, 1980). No matter what grade level, it is clear that the majority of schools do not have the necessary built-in mechanisms that identify the warning signals before they grow into irreversible problems and crises.

Research studies on dropouts are invariably divided into urban or rural perspectives. The urban studies generally concentrate on reported unemployment in the black and Hispanic communities, especially among youth. This is followed by a close look at the higher than average data on minority member dropouts. Ginzburg, writing in Scientific American, comments:

> "...this emphasis on black youth is justified by the appalling facts about their high unemployment rates and their low labor-force participation; they are not the only vulnerable group. Young whites outnumber black and other minority young people by about nine to one, which means that most of the young people who are in trouble are white." (Vol. 242, no. 5, May, 1980, p. 47)

This consistently "fits" the literature profile of the stereotypic dropout. When characteristics are fused, the composite picture of the dropout reveals a white male, sixteen years of age, with a high truancy rate, a history of poor school attendance or behavior, low self-concept, does not participate in school activities, and has significantly deficit abilities in academics and achievement compared to his peers (about one-half of all dropouts have failed at least one grade by the tenth grade). They are members of lower socio-economic groups* and members of families who do not have the enthusiasm or wherewithal to provide the resources and support for their children (Rhode Island Study, 1978; Timberlake, 1980; Boyer, 1978; Fox and Elder, 1980).

Even with the enormous amount of current research, it remains a puzzle why students drop out. There is no single factor that is responsible for

*In low income families, the dropout rate of whites is higher than that of blacks, though slightly below that of Hispanics. Giving Youth A Better Chance, The Carnegie Council on Policy Studies in Higher Education, 1979, p. 51.

students choosing this option. It is an accepted fact that students rarely make a dramatic decision in one day to drop out of school. The decision is usually a result of a culmination of experiences that span the student's entire school career (Fox and Elder, 1980). Documented reasons traverse the spectrum, making it difficult to formulate a nice neat prototype or model to follow in designing preventative programs.

The following section represents the reseach findings of several current studies that explore the reasons why students left school. (It is worth repeating, that this particular study has not been undertaken anywhere else in the country. Related studies concentrate on students who leave programs during the regular academic year.) For the purpose of this study, rural states and vocationally-related studies were examined and reported.

*Minnesota: During the period of 1974 and 1977, a total of 4500 students, age 16 and over, left the St. Paul, Minnesota, Public Schools. (Of these, 1350 were identified handicapped and enrolled full- or part-time in Special Education programs).

Reasons for leaving school given by this group of 4500 students were as follows:

1.	School problems	4236
2.	Military	86
3.	Pregnancy	65
4.	Marriage	48
5.	Economic problems	32
6.	Expulsion	27
7.	Placed in correctional institutions	6

(ED191233 - Model Program for Handicapped Out of School Youth, 1977-81)

•Arkansas: A study conducted to validate or improve the vocational career orientation program surveyed 29 students who dropped out of vocational career orientation classes and secondary schools and gave the following reasons (n=29):

1.	Not interested in school (absenteeism, discipline problems, employment)	24.13%
2.	Pregnancy	13.79%
3.	Poor student-teacher-counselor relationship	13.79%
4.	Money problems	10.34%
5.	Military	6.90%
6.	Grades (poor scholarship)	6.90%
7.	Lost self-respect	6.90%
8.	No response	6.90%
9.	Dissatisfied	3.45%
10.	Marriage	3.45%
11.	Poor school offerings	3.45%

(ED195676 - Study of Graduates and Dropouts to Determine Need for Vocational Career Orientation, 1975-1978)

•Missouri: A study of dropouts from secondary schools in 5 Missouri Ozark school districts was designed primarily to determine the perceived need or desire for additional vocational or academic training. The following factors were listed as reasons for dropping out. A random sample of 268 dropouts (127 females and 141 males - ages ranged from 15 to 29 at the time of the interview) were surveyed:

1.	Marriage and/or pregancy related	29.1%
2.	Conflict with teachers & administrators	22.4%
3.	Did not like school or were bored	21.6%
4.	Financial or occupational problems	9.3%

Additional data includes:

65% perceived that school rules had some influence on their decision to quit

30.6% reported that they had been either suspended or expelled while they were in school

63.8% reported talking to no one before leaving school

(ED168777 - A Research and Development Approach to Rural Education: A Case Study)

*Ohio: According to the Governor's Study Committee on High School Dropouts and Unskilled Graduates from Ohio (January 20, 1981), the most frequent reasons given for dropping out are:

1. Did not like school; school was not interesting to the student.
2. Did not see any value in going to school.
3. Became pregnant and/or married.
4. Needed money and/or wanted a job.
5. Had home/family problems.
6. Had academic deficiencies and failure experiences.
7. Had conflicts with teachers and/or administrators.
8. Became ill.
9. Involved with drug abuse.

*Rhode Island: 1978, Vocational Education Early School Leaver Study (ED164987), asked vocational students to respond to the question, "If you have thought seriously about dropping out of school, what reason would you have ranked first if you had decided to drop out?" (Within their total sample, 30 vocational students had, at one time, considered dropping out of school.)

Rhode Island: 1978, Vocational Education

Early School Leaver Study

Reasons	Number of Responses*	Percentage of total Students Answering**
Failing or making poor grades	10	33.3
Get a job; make money	6	20.0
Aggravated with treatment from teachers/ administrators	5	16.7
Disliked school	5	16.7
Family or personal problems	4	13.3
Got nothing out of school	3	10.0
School too hard	1	3.3

*More than one response per student possible
**N=30

Reasons Given For Staying in School by Vocational Students Who Considered Dropping Out

Reasons	Number of Responses	Percentage*
Finish school to get a good job	12	40.0
Parents	11	36.7
Teachers or guidance counselors	2	6.7
Friends	1	3.3
Other	4	13.3

*N=30

•Wisconsin: Wisconsin Vocational Studies Center, reporting on the 1979 follow-up study of 571 Wisconsin high school non-completers (1967-76) by Kumar and Bergstrand. A list of reasons indicate:

1.	Didn't like school	20%
2.	Work	13%
3.	Academic deficiencies	12%
4.	Pregnancy	6%
5.	School environment	5%
6.	Marriage	5%
7.	Personal/family problems	5%
8.	Didn't see value of school	4%
9.	Conflict with teachers	4%
10.	Peer pressure	4%
11.	Military	4%

Additionally, the respondents reported:

28% found coursework useless

22% indicated that their special needs were not met

15% indicated that course content did not fit career plans

23% suggested that schools make curriculum more practical

(Dropout Prevention in Wisconsin, Vol. 1, Sept. 1979, Wisconsin Vocational Studies Center, University of Wisconsin-Madison)

•Colorado: In a technical report entitled Survey of Non-completers and No-shows of Vocational Programs, the State of Colorado commissioned a study "...to define why students have not completed their programs, and to identify prescriptive measures to reducing the problem." The five most frequent reasons given by 368 non-completers (those failing to complete at least 50% of the vocational program's requirements) for dropping out of their vocational programs were:

1.	Quit school	49.8%
2.	Moved out of the school district	17.5%
3.	Found I didn't like doing most of the activities required by the program	11.5%
4.	Scheduling conflict	9.0%
5.	Vocational education program wasn't what I expected	8.3%

Reasons given by 177 no-shows (those who enroll in vocational programs but never attend class) are surprisingly the same as the non-completers. Other variables discovered in this study include:

* The disadvantaged population has a higher proportion of non-completers than the population in general.
* Vocational education programs have a positive effect on lowering the school dropout rate.
* Counselors interviewed identified many of the students dropping out of vocational education programs to be the potential high dropout risk students (that are given a last chance) in a vocational education program.
* A large percentage of those students not experiencing career education did not complete their vocational education program because: (1) it was too time consuming; (2) grades in the first year were too low; and (3) they didn't get along with other students.
* A majority of the counselors surveyed gave "loss of interest," or "changing career objectives" as the major reason students did not complete vocational education programs. These were also the major reasons given by the administrators for students not completing their vocational education programs.

Specific View: The Vocational Program Leaver

Reasons, Rates, and Goals

As seen in the previous section, information resources, while available, usually refer to and address the problem of school dropouts in the broad sense. This study represents a unique research approach in that it addresses the issues surrounding a specific type of dropout--the vocational student who has not returned to the skill training following the summer of his/her junior year.

In terms of related research, four current studies were identified using the ERIC documents. The studies are:

1. (ED164987) Rhode Island State Department of Education, Providence, Bureau of Research and Evaluation, Vocational Education Early School Leaver Study, Final Report, 1978.
2. (ED154268) Wilson, Aaron, Jr., Development and Implementation of a Structured Program for the Systematic Reduction of Factors Contributing to Students Dropping Out of School, Chester Upland School District, Pennsylvania, 1978.
3. (ED201752) Gateway Vocational Technical School, Batesville, Arkansas, Specific Career Orientation Readiness Evaluation, Final Report, 1981.
4. Research Coordinating Unit, Division of Vocational-Technical Education--RCU News--Statistical Report Analysis.

Overview of Studies:

The Rhode Island study focused on factors that influence a student to opt for vocational programs and reasons why students drop out of high schoool. By means of student interviews, school attitude questionnaires, personal interviews, and school records, a series of recommendations were formulated

for improving vocational education and dealing productively with potential dropouts. One particular recommendation of this study, which seems almost prophetic within the context of this research, is the suggestion to do "...subsequent studies that examine groups of students who have chosen to drop out of vocational programs and re-enter a comprehensive high school or to leave school altogether. Such a study would be directed toward an assessment of some of the weaknesses of vocational education from a student perspective." (pg. 6)

One limitation in using this study revolves around their comparison of vocational students and high school early program leavers. Unfortunately, "...due to a lack of data and to reporting methodology..." it was impossible to compare the holding power of vocational programs with those of affiliated high school and cross referencing those students who started in vocational education and subsequently dropped out. In the preceding section, a list of reasons that might contribute to dropping out was documented but these students had only thought of dropping out as opposed to the group that actually did drop school.

Even with the above mentioned limitization, the Rhode Island study was still able to formulate suggestions and recommendations. Within this list are many factors that certainly have been known to contribute to dropping out. Again, this study is highly favorable to vocational education and views vocational programs as one way to hold the dissatisfied student in school, especially if vocational education can be introduced early. Patterns of school failure have been established long before many students are even eligible for vocational education, so in the present set of circumstances, vocational education is not a factor in keeping these people in school.

Conclusions based on study results include:

1. steps should be taken to relate academics to vocational programs
2. more emphasis should be placed on career education and vocational planning early in the school experience
3. vocational guidance should be available to all students who apply to vocational programs, not just those who are accepted--"Good guidance seems to be an important part of a good vocational program, and lack of good guidance may cancel out whatever gains the vocational education program offers its students." (pg. 83)
4. sending school students drop out due to transportation and scheduling reasons
5. vocational students felt that their school days and class periods were too long
6. rigid scheduling with the same thing every day was "boring"
7. a flexible scheduling option such as the "week-about" program in which seniors in auto mechanics, carpentry, and electronics spend every other week in vocational courses might prove appealing (see the Wilson study for further information on scheduling options)
8. students from sending schools found changing schools socially disruptive; transition would be eased if students were acquainted with the vocational program and faculty before the tenth grade
9. students who end up in their second or third vocational choice often are unhappy; it rarely fits their career goals and could create the climate for dropping out.

Although the Rhode Island study does not survey the same population as this study intends to, it does introduce more variables affecting the student who chooses to drop the vocatioal program (i.e., transportation, lack of career orientation and maturity, changing schools, uncoordinated programming between general and vocational education, etc.).

The second study highlighted in this section, by Wilson, chose to focus on reducing the most common factors contributing to dropping out. Factors such as truancy, suspensions, tardiness, cutting of classes and absenteeism were identified by the researcher as being the focal point of change. An analysis of the data compiled from seventeen trade and industrial classes within the vocational department at the Chester Upland School District in Pennsylvania during the 1974-75 school year revealed that out of a population of 425 tenth, eleventh, and twelfth grade students, an average of 6% were found to be truant, 13% were on suspension, 19% were absent, 12% were cutting classes, and 20% were tardy. Thirty-two percent (32%) of the students enrolled in vocational education left school in this period, compared to 25% in the general track.

The affect of such dramatic changes in program numbers caused several of the programs to be discontinued.

The initial data for this study was collected to document the need for a pilot program aimed at reducing factors that contribute to the high dropout rate among students in the vocational programs. The program will be presented in the next section.

The third study examined comes closest in providing related data on vocational dropouts. The Gateway Vocational-Technical School in Arkansas enrolls approximately 200 full-time students in such training areas as: auto mechanics, building trades, inspection, precision measurement, industrial equipment mechanics, office occupations, and licensed practical nursing. During the 1976-77 school year, 40% of the students dropped out or changed courses. Figures from the White River Vocational-Technical School, another training school in Newport, Arkansas, reported an average of 57% dropout/change rate. It is noted that these percentage rates were in excess of the normal attrition rate experienced by other comparable

vocational schools. A listing of twenty-two other vocational schools reported the dropout rate from a low of 13% to a high of 57%. The average state dropout rate of students who dropped prior to completion was 31%.

Reasons or factors contributing to the high dropout rate at Gateway were given as:

1. the school is located in a catchment area with a high concentration of socioeconomically-deprived individuals
2. students exhibit poor adjustment to programs due to inadequate educational backgrounds and/or career awareness which precludes them from making a meaningful career decision prior to enrolling in vocational school
3. the school has no director of student services who might offer necessary career guidance prior to enrollment.

The study concluded that adequate pre-enrollment career orientation could greatly reduce the number of students who become dissatisfied and drop out of school. The resulting pilot program, entitled: Project SCORE--Specific Career Orientation Readiness Evaluation--will be presented in a later section.

One of the more obvious conclusions that can be gleaned from the studies summarized above is the varied approaches that can be taken to attack a specific problem. The varied approaches, which are reflected in the numerous prevention programs, are a direct result of the numerous responses given as reasons for dropping out.

*New Hampshire: Data from 1980-81 on vocational enrollment and program leavers, prepared by the Research Coordinating Unit (RCU) at the State Department of Education's Division of Vocational-Technical Education, reveals the most up-to-date information (via the management information system) on the scope of vocational program leavers. The reported figures were generated by schools with approved secondary vocational programs.

The three research reports from the Research Coordinating Unit (RCU) contained data from 1980-81 school year. These reports are entitled:

1. 1980-81 Vocational Enrollments and Program Leavers at the Regional Vocational Center
2. 1980-81 School Year Vocational Education Program Leavers: Sending School Students Compared with Receiving School Students
3. 1980-81 School Year Vocational Education Program Leavers: Students with Identified Special Needs.

During the 1980-81 school year, 11,385 secondary students were enrolled in two-year vocational programs. Eighteen percent (n=2,053) of those enrolled discontinued their program during the school year. Of the 2,053 vocational program leavers, 917 were withdrawals and 1,136 were transfers. The statewide program withdrawal rate was 8% and the transfer rate was 10% (Table 1). The major reasons for leaving vocational programs during the academic year were (Table 3):

1. transfers to an academic or basic studies program or another vocational program, and
2. withdrawals due to unsatisfactory performance, personal problems, and reasons unknown.

Statewide, approximately 7% (n=790) of those vocational students expected to continue from the 1980-81 schoool year to the 1981-82 school year did not re-enroll. This is the population that this study will investigate. Taken as a whole, the total number of vocational program leavers from September, 1980, to September, 1981, was 25% (withdrawals and transfers and students failing to re-enroll [Table 1]).

When comparing termination rates from sending schools* and receiving schools, it was discovered that sending school students had a termination rate of 25% and receiving schools had 17%. The sending school students did less transferring to other vocational programs, or to academic or basic studies programs. However, according to the report, a much larger percentage of sending school students transferred to other schools.

When the RCU compared the termination rate and students with identified special needs, a higher than average rate was revealed. Approximately 5.5% (n=622) of the vocational enrollment in 1980-81 were identified as being handicapped. Data on handicapped program leavers indicated that 157 students discontinued their programs. This represents 25.2% of the total number of enrolled handicapped vocational students (Tables 2 & 3).

*The RCU definition: Sending school students are students that are enrolled in a vocational education program housed at a facility other than their own high school (these students are usually tuitioned with state vocational education funds). Receiving school students are students that are enrolled in a vocational education program at their own high school or regional center.

Figures for the disadvantaged represent an even greater disparity. Approximately 4.8% of the vocational enrollment were identified as being academically disadvantaged. Data on academically disadvantaged program leavers indicate that 160 students discontinued their programs. This represents 29.6% of the total number of academically disadvantaged students enrolled in vocational programs. Approximately 3.2% of the vocational enrollment were identified as being economically disadvantaged. Data on these program leavers indicate that 153 students discontinued their programs. This represents 42.1% of the total number of economically disadvantaged students enrolled in vocational programs (Tables 2 & 3).

TABLE 1. Regional Center Vocational Program School Year Leavers: Withdrawals, Transfers, and Students Failing to Re-Enroll, 1981

Regional center	Vocational enrollment	Program Leavers **Withdrawals #	**Withdrawals %	***Transfers #	***Transfers %	Number of students failing to re-enroll	Percent of total enrollment failing to re-enroll	Percent of total enrollment as program leavers and students failing to re-enroll
01 Colebrook	127	8	6.3	6	4.7	4	3.2	14.2
****02 Berlin	410	25	6.1	21	5.1	27	6.6	17.8
03 Littleton	104	3	2.9	18	17.3	12	11.5	31.7
03 Whitefield	262	12	4.6	24	9.2	22	8.4	22.2
****05 Plymouth	188	11	5.9	47	25.0	17	9.0	39.9
06 Conway	152	9	5.9	20	13.2	20	13.2	32.3
07 Lebanon	97	6	6.2	0	0.0	4	4.1	10.3
08 Laconia	235	45	19.1	14	6.0	17	7.2	32.3
09 Wolfeboro	112	4	3.6	19	17.0	5	4.5	25.1
10 Claremont	331	18	5.4	9	2.7	31	9.4	17.5
11 Concord	544	73	13.4	41	7.5	19	3.5	24.4
****12 Somersworth	298	46	15.4	21	7.0	13	4.4	26.8
****13 Keene	689	25	3.6	66	9.6	55	8.0	21.2
14 Peterborough	159	17	10.7	10	6.3	19	11.9	28.9
15 Manchester	913	65	7.1	99	10.8	*	*	17.9
16 Nashua	853	69	8.1	59	6.9	77	9.0	24.0
17 Salem	453	59	13.0	72	15.9	14	3.1	32.0
****18 Exeter	585	32	5.5	56	9.6	31	5.3	20.4
19 Portsmouth	432	64	14.8	60	13.9	43	10.0	38.7
20 Dover	603	51	8.5	47	7.8	68	11.3	27.6
State totals*	11,385	917	8.1	1,136	9.9	790	6.9	24.9

*Totals presented are statewide totals and are not regional totals.

**Withdrawals include: 1) Unsatisfactory performance, 2) Economic reasons, 3) Entered armed forces, 4) Personal problems, and 5) Reasons unknown.

***Transfers include: 1) To another vocational program, 2) To an academic or basic studies program, and 3) To another school.

****Regional vocational centers volunteering for study.

TABLE 7

Vocational Program Enrollment:
Students With Special Needs
1981

Special needs category	Number of special needs students enrolled	Percent of total vocational enrollment
Handicapped	622	5.46
Academically disadvantaged	541	4.75
Economically disadvantaged	363	3.19
Limited English proficient	4	.04

TABLE 3.

Handicapped, Academically Disadvantaged and Economically Disadvantaged Program Leavers: Reason for Termination 1981

Termination reasons	Number of program leavers	Percent of total enrollment leaving programs	Number of handicapped students leaving programs	Percent of handicapped students leaving programs	Number of academically disadvantaged students leaving programs	Percent of academically disadvantaged students leaving programs	Number of economically disadvantaged students leaving programs	Percent of economically disadvantaged students leaving programs
Transferred—to another vocational program	351	3.1	42	6.8	22	4.1	8	2.2
Transferred—to the academic or basic studies program	600	5.3	22	3.5	17	3.1	8	2.2
Transferred—to another school	186	1.6	40	6.4	21	3.9	27	7.4
Withdrew—unsatisfactory performance	295	2.6	19	3.1	29	5.4	12	3.3
Withdrew—economic reasons	52	.4	2	.3	5	.9	20	5.5
Withdrew—entered armed forces	23	.2	2	.3	3	.6	1	.3
Withdrew—personal reasons	259	2.3	17	2.7	17	3.1	13	3.6
Withdrew—reasons unknown	287	2.5	13	2.1	46	8.5	64	17.6
Total program leavers	2,053	18.0	157	25.2	160	29.6	153	42.1

The majority of dropout prevention programs concern themselves with general education, without much regard for the influences and possible significance of vocational education (Abram and Cobb, 1981).

This should not be construed as an indictment, since the patterns of school failure have been established long before many students are eligible for vocational education.

With the primary thrust of vocational education directed towards training students with marketable skills, providing skills necessary for economic self-support and psychological self-satisfaction (1982 N.H. Annual Plan), it is a national tragedy to see the persistent rise in school dropouts. The irony of the situation is that the goals of vocational education are diametrically opposed to the consequences of the school dropouts who, historically, have had the lowest labor force rate and the highest unemployment potential. Youth who drop out of school frequently lack training and skills essential in finding a productive and satisfying or secure place in the world of work and will cost society billions of dollars in lost income, government revenue, crime prevention, and welfare payments (Jones, 1977).

In a society that touts the dream of advancement, self-fulfillment, and high purchasing power, it is a cruel joke that alienates the dropout from the mainstream who seek equality in education and employment.

In more cases than not, schools have de-emphasized the importance of retaining the potential dropouts who, through their uncooperative behavior, alienate themselves from the school mainstream. Augustin and Novak cite that many schools, community programs, and services may function to keep

individual students from dropping out of school even though they have been designed and operate without that specific intention. Vocational education classes and athletic programs are commonly cited examples. In a survey of recent dropouts concerned with why students left school, it was revealed that students might not have left school had the school let the potential dropout enroll in vocational education programs prior to leaving (Abram and Cobb, 1981).

The potential dropout, using the language of vocational education legislation, is categorically a disadvantaged person who may actually be barred from vocational programs that traditionally require the attainment of specific grade levels and academic achievement (1982 N.H. Annual Plan).

If potential dropouts do manage to enroll in vocational courses, the same downward spiral in academic advancement may still plague them. Most entry-level vocational programs (with the exception of agricultural programs) are designed for the student who has a basic skill level of at least tenth grade, as witnessed by the dependency on high level textbooks and an average proficiency in computational skills. A student without support services and guidance may find vocational education as inhospitable as general education.

In a report of recommendations published by the Carnegie Council on Policy Studies in Higher Education, Reubens' reserch is cited that contends that "...at least among males, dropout rates are higher for vocational students than for students in other programs, even when students are controlled for ability and socioeconomic status." (Carnegie, 1980, p. 138)

Programs designed to reverse the dropout rate and offer alternative school curricula have been on the increase due to the documented high rate that leave school and the availability of supplementary funds provided for

that purpose (1965 Title VIII ESEA and PL 95-600). "It's a shocking fact that today 24% of those who enter our high schools drop out before they finish," with these remarks, Commissioner of Education, Ernest L. Boyer, presented his strategy for working on this problem to the 1978 Convention of the American Vocational Association. Although New Hampshire does not approach national figures in its general education programs, its vocational dropout rate for 1980-81 has been reported at the 25% level (obviously, with a much smaller population count).

According to a 1979 comprehensive review of programs from Wisconsin, "...dropout prevention programs generally fall under two categories: they either (1) attempt to change the academic program to adapt to the students or (2) attempt to bring about behavior changes within the student. Programs may fall under one of these categories or may be a combination of the two." (pg. 21)

This next section will present a smorgasbord of programs designed to reduce the dropout rate. In all cases, programs may be replicated at other schools.

Yuma Union High School, Arizona, (An Alternative School): Under the direction of the Community Education Department, the Yuma School District founded YESS--Yuma's Educational Support System. Designed to stem the ever-increasing problem of dropping out, YESS is directed at the potential dropout with attendance, social, or academic problems. Specific goals include improving the students' educational and basic learning skills; engaging students in a program which will develop a more positive self-concept and thus improve personal and social adjustment; involving students in career and vocational exploration; reducing truancy and delinquency among those students enrolled; counseling each student toward a successful placement in the home school, vocational school, or full-time employment; and providing instructional opportunities in support of high school graduation when returning to the home school, the GED, and/or job readiness skills.

Exemplary features that help meet these goals include diagnostic and prescriptive testing, small classes, individually-prescribed and competency-based instruction, intensive counseling, career awareness seminars, a major emphasis on the development of fundamental skills, and an experienced staff with background in special areas, such as those dealing with the emotionally disturbed, dropouts, possible delinquents, and other behavioral problems.

The program was designed to enroll approximately 75 students. The anticipated level of funding will be approximately $150,000 for the first year. Sources of funding will be local district money; contributions from local agencies; private donations; state funding (vocational/career education dollars) and federal sources.

The program description for this project was derived from a rationale statement and did not include information on the outcome of the plan.

(Carbrera, M., Rational for an Alternative School Serving the Yuma Union High School District, March, 1979, ED191605).

Saint Paul Public School, Minnesota: An out-of-school pilot program designed specifically for 250 secondary age students who were previously enrolled in special education programs and have dropped out. After dropping out, many just sat at home not doing much of anything, some had part-time work, others wandered the streets, and more than 50% have appeared in juvenile court.

Any handicapped person (16-21 years of age) who enrolled in this program would receive the necessary education/socialization skills to become a self-sufficient, income earning, young adult, able to compete in the job market to the best of his/her abilities.

In contrast to the traditional schools in St. Paul, this program addressed itself to meeting the total needs of the student (academic, health/living skills, vocational, social/emotional, and community interaction needs).

Exemplary features that help meet these goals include: active recruitment of out-of-school handicapped youth, vocational assessment/evaluation, up-dating of Individual Education Programs (I.E.P.), established early education program for high-risk babies of enrolled student parents, recruited and established an advisory council, in-service for staff, work placement programs, court service assistance to students involved with the courts, prepared publicity and recruitment tools to attract more students, assistance in avoidng transportation obstacles, and a staff that is

dedicated to serving the individual needs of participants.

(Model Program for Handicapped Out-of-School Youth, ED191233).

Norton City, Virginia, Schools: A K-12 career education program using the Four I's Project (Intervention, Introduction, Investigation, and Involvement).

The goal of the program was to significantly intervene in the lives of a group of youth by introducing them to a broad range of occupational information by allowing them to manipulatively investigate several occupational areas, and by enabling them to become involved in actual work and learning experiences.

Students gain current occupational information with manipulative skills provided through a cycling system of exploratory lessons in masonry, carpentry, small engines, electricity, food services, sewing, health occupations, and cosmetics. Intensive guidance and counseling is provided through group and individual counseling, guest speakers from the working community, and on-the-job visitations.

The Four I's Project (1973) reported achievement in areas of: guidance, work placement, self-concept, changing teacher attitudes, parental awareness, and occupational knowledge.

(Model Program for Handicapped Out-of-School Youth ED 191233, and The Dilenowisco Four I's Project: "Career Education for Norton City Schools" ED 115741).

Youthwork Career Planning and Dropout Prevention Program: Jersey City, New Jersey; a federally-funded pilot program designed to integrate multiple agencies in reducing the student dropout rate. The Jersey City Mayor's

office, Board of Education, Ferris High School, and CETA combine forces to provide a comprehensive program revolving around guidance counselors and teacher advisors.

Teacher advisors work exclusively with a designated counselor's freshman group. The teacher advisor reviews the cumulative records of each freshman student during the first two weeks of school to discover a potential dropout (i.e., past absentee patterns, severe financial need, failure patterns, behavioral problems, health problems, etc.). A targeted student identified early will receive an immediate interview to determine if further referral is necessary. Counselors, peer tutors, attendance department personnel, community agencies, and parent volunteers are alerted of any problems in need of intervention. The community agencies and parent volunteers make family contact during the evening.

Teacher advisors assist their freshmen with career exploration and work preparedness skills. Jersey City CETA has provided jobs for those freshmen who meet the CETA guidelines. These employed freshmen must live up to the strict CETA guidelines and responsibilities. No freshman can be absent and report to work. No freshman can quit school and remain on the job. Initial results indicate a high degree of success with freshmen from the Ferris High School pilot program.

(Amerata, Frank J., "Youthwork Career Planning and Dropout Prevention Program," VEA-NJ Journal, Vol. 3. No. 2, June, 1981, Bill Smith, Editor, 169 Milltown Road, East Brunswick, NJ 08816).

Project S.A.V.E.--Seeking Alternative Vocational Education: This Arizona-based project is designed to provide vocational, education, training, and support assistance to young people who may, or who already

have, dropped out of the regular school system prior to graduation. One major goal is to keep potential dropouts in school by vocational education programming. For dropouts, the goal is to enhance their chances of successful employment by providnng vocational training and/or job placement.

Professional educators, with demonstrated prior success in working with young people, provide direct service to participants. Self-awareness activities and vocational assessment are key ingredients of the program. Short training workshops are conducted to provide dropouts with job seeking and survival skills. The prime feature is one-to-one informal counseling/guidance sessions between the S.A.V.E. coordinator and the student. The coordinators are "on call" 24 hours a day, seven days a week.

The program seeks to identify students in grades 8-12 who are considering exiting from educational programs prior to graduation. Thorough assessment of vocational and educational strengths/weaknesses alert the staff to any changes that must be made in the educational plan.

Potential dropouts will often receive tutorial and/or specialized supportive services to successfully complete a vocational education program while remaining in school. As the program evolved, various community partnerships were formed, which further strengthened the chances for successful work placement and participation. Linkages with the county probation departments, community colleges, CETA, and service clubs yielded the best results. This vocational project was largely funded through the Vocational Special Needs Division of the Arizona Department of Education.

Pinellas County, Florida: Project P.A.S.S.--Positive Alternatives to Student Suspensions: P.A.S.S. was designed to provide a sequence of intervention stratgies to prevent and/or minimize the frequency of non-productive social behavioral acts of high school students. This is accomplished by having a social worker and school psychologist provide individual and group consultation sessions to identify students and faculty members. The major goal for teachers is to interact more effectively with their teen-age students. Equally as important, the program assists parents in developing communication and problem-solving skills which lead to improved family relationships. A counseling component for both parent and student is incorporated into the project.

P.A.S.S. also introduced a twelve week program to teach students that it is possible to survive in school and to receive positive feedback from teachers and other students. The program combines techniques in behavior modification, values clarification, reality therapy, and transactual analysis to develop student strengths and to help them acquire social skills which will enable them to cope more effectively in their daily interactions.

In comparison to the control group high schools, the P.A.S.S. program did significantly reduce the suspension rate in participating high schools. Central to the success of the program are staff development workshops that train school personnel in providing a humanistic environment that emphasizes mutual respect and collaborative involvement.

Project P.A.S.S. is nationally-recognized as a demonstration project with the National Diffusion Network.

(Bailey, Ralph E. and Kackley, John C., Positive Alternatives to Student Suspensions: An Overview, distributed by Pupil Personnel Services

Demonstration Project, All Children's Hospital, 801 6th Street South, St. Petersburg, Florida 33701, 1981).

The Wichita Public Schools' Project DEEP—Diversified Educational Experiences Program: Project DEEP is another program funded for national dissemination by the National Diffusion Network.

DEEP is an alternative classroom management system for secondary schools which is student-centered and project-oriented. The program was originally designed for the apathetic learner, the poor attendee, and the potential dropout. It has since been used effectively with gifted and talented students.

Students in DEEP classrooms identify needs, formulate objectives, develop tasks based upon their chosen objectives, receive teacher debriefings and participate in their own evaluation. DEEP offers learners alternative ways to express, gather, develop, and display information consistent with the student's learning style. Community resources are used and the classroom environment resembles that of a workshop (i.e., casual, open, trusting, and task-oriented). The instructional process allows the teacher to create an academic setting that emphasizes success for each learner.

Evaluation of Project DEEP revealed that adopting schools had a 30% decrease in absences and a 37% decrease in school dropouts. Student attitudes about the value of knowledge were greatly improved and DEEP students showed less hostility toward the educational system. Additionally, these students showed significantly improved respect for others.

(Project DEEP, National School Resource Network Case Study Journal, Profiles of 21 School Climate, Discipline, and Security Programs That Work, April, 1981).

The following two studies, which appeared earlier in this review, specifically address dropout prevention in vocational education programs (and there are very few documented examples!).

Wilson, in his study entitled, "Development and Implementation of a Structured Program for the Systematic Reduction of Factors Contributing to Students Dropping Out of School," initiated a pilot project aimed at reducing factors that contribute to students dropping out of vocational education programs. In an earlier section, enrollment data revealed that 25% of the students in the Chester Upland School District's general education track failed to complete their high school degree, while 32% of the students enrolled in vocational education left school (1972 to 76 figures).

Goals and objectives were formulated to reduce the trend of dropping out using the most common predisposing indicators (tardiness, class cutting, absenteeism, suspension).

To carry out the research, the author's conceptualized solution to the identified problem was to humanize the education for a group of potential dropouts, and to change the delivery system within a single course of a vocational training program. This was accomplished by making a more careful selection of teaching personnel, conducting a more effective guidance and counseling program, providing for indiviualized instruction, increasing student involvement in extracurricular activities, soliciting community involvement, maintaining a closer liaison between the school, the community, and industry, and by continuously monitoring and evaluating student performance.

The majority of the participating students were black, reflecting the predominant population of the school district. By governmental standards, most were classified as poverty-level or below and exhibited such habits

as truancy, suspensions, tardiness, cutting classes, and high absenteeism. After a series of selection processes, sixty tenth graders with high dropout potential were randomly selected out of a population of three hundred. Thirty students were assigned to an experimental group and thirty were assigned to a control group. The control group did not receive any special treatment, and functioned as part of the traditional vocational program in autobody repair.

The experimental group received a varied instructional program, based on prior strategy sessions involving the personnel in the research. The greatest change in instruction appeared to be the teaching approach adopted by the instructors. Three one-day workshops were held for participating instructional staff to explain the project's purpose. Teachers were required to project themselves nine months into the future. They formulated process and behavioral objectives, and mapped out delivery systems that would achieve the objectives. Numerous additional hours were spent on developing activities and techniques that would "reach" potential dropouts.

In the experimental group individualized instruction was achieved via modules that organize knowledge of a specific area. Each module included the following:

1. behavioral objectives
2. prerequisites
3. pre-assessment
4. instructioal activities
5. post-assessment
6. remediation, if necessary

Through a competency-based curriculum, students were able to progress at a more flexible pace and be evaluated accordingly. The post-assessment was designed to be retaken until the student achieved a high of 100%.

The experimental group's school schedule and environment was designed around a "one-half day about basis," where the group divided into two smaller sections and rotated one-half day in related class instruction and the other half in the laboratory. The control group worked on a "week about schedule," which was standard for the regular vocational program.

As one might guess, the experimental group achieved more significant gains in student self-concept, and recorded reduced factors contributing to dropping out.

In an earlier section, Project SCORE from the Gateway Vocational-Technical School, Batesville, Arkansas, was featured in reference to reasons why students drop out of programs. As a result of the high percentage of students who discontinue vocational training, a project was developed to assist potential vocational students with realistic career decision-making skills prior to enrollment. Specifically, the goals of the program were:

1. To develop and implement a pre-enrollment specific aptitude evaluation program for each of the training areas offered.
2. To develop basic orientation materials, to be used in acquainting potential students with career fields prior to enrollment. The basic orientation will develop an awareness of non-traditional roles and promote equal access to vocational programs.
3. To further develop the job sampling process by establishing standards for norms which can be used to predict with a

reasonable degree of accuracy an applicant's aptitude for a given course prior to entry.

4. Efforts to improve staff competencies will include an increased awareness of non-traditional roles through in-service training and promotion of these roles in aiding students in making career choices.

To implement the above goals a full-time staff member was employed as project director. This person worked under the direction of the Gateway vocational director.

Procedurally, the following steps were taken:

1. All potential trainees were administered the General Aptitude Test Battery (GATB) before participating in other career awareness activities.
2. General information was presented about the vocational offerings at Gateway (20 minute audio-visual presentation on the training areas).
3. In-service training was scheduled with the instructional staff. The orientation materials were developed by instructors, after a student needs assessment identified key issues related to the selected course and career field information.
4. Instructors developed a series of job sampling tasks representative of common occupational activities.
5. Field testing developed samples and orientation materials.
6. Potential students were scheduled for pre-enrollment orientation, testing, and individual conferences. During the orientation, potential students were informed of school policies, employment opportunities, and salary potential of each training area.

7. Counseling services were expanded. Students could seek educational, personal, and financial services upon request. This component was adopted as a result of an earlier program review that identified vocational guidance as a missing link in services.

Results:

*A follow-up survey of students who participated in the orientation indicated that over 90% felt that pre-enrollmet orientation was helpful.

*Eighty-four percent of the students enrolled in a training program compatible with their interest, aptitude, and ability.

*Faculty evaluation indicated that orientation was helpful.

*The dropout rate of specific training areas are indicated in the following charts:

Gateway Vocational School

Department	1978-79	1979-80
Auto mechanics	63%	40%
Building trades	40	12
Industrial maint.	29	37
Inspection	50	28
Licensed nursing	14	17
Office occup.	52	33
Total	41%	28%

White River Vocational School

Department	1978-79	1979-80
Auto mechanics	66%	47%
Appliance repair	50	25
Carpentry	78	40
Diesel mechanics	57	43
Nursing (LPN)	33	26
Office occup.	64	66
Welding	49	33
Total	57%	45%

One particular limitation that the study does not elaborate on is the use of the General Aptitude Test Battery (GATB). Does the test aid in the identification of potential dropouts or does it act as a "gatekeeping" mechanism? No mention is made of special services offered to handicapped and disadvantaged learners. Special populations may be more prone to low academic performance and therefore be considered high-risk, potential dropouts. Taken as a whole, the project did accomplish many of its intended goals and the dropout rate was sigificantly less than the majority of the twenty-three vocational-technical schools in the state.

A Synthesis of Exemplary Practices Aimed at Reducing The Attrition Rate of Vocational Program Leavers: A Literature-Generated Profile

The intent of this section is to synthesize the proven practices of recognized exemplary programs for the purpose of deriving a program model aimed at reducing the number of vocational program leavers (both during the school year and the summer months).

As documented in the previous sections, a pot pourri of model programs, directed at reducing the attrition rate have been developed that are potentially replicable in a variety of other settings. Particularly impressive is the number of successful programs in career education that have been implemented during its relatively short life span (Youthwork, Inc., 1980, and Drake and Stewart, 1981).

Programs that infuse career education early in the school experience have fewer problems associated with dropping out (i.e., absenteeism, behavioral problems, suspensions, tardiness, delinquency). Even in short term studies over the course of one academic year, under some relatively harsh environments, comprehensive career education programs produced significant increases in participants' vocational maturity and subsequent increases in vocational program enrollmnent (Drake and Stewart, 1981, Winter).

> "Research findings have documented unequivocably that youth with knowledge of careers, with self-assurance and motivation, as well as realistic understanding of the demands of the work place are more likely to hold jobs as teenagers as well as to have subsequent labor market success as young adults."
>
> -Youth Knowledge Development Report, p. ii, May, 1980

Aside from incorporating a comprehensive career education program into schools, the most commonly cited practice for retaining students is offering a multifaceted counseling service. It should be noted that counseling of this nature is not synonymous with the services of most guidance counselors. The role and function of guidance counselors in public schools do not offer the type of intensive counseling needed for crises intervention and behavior management. Guidance personnel, with a case load of several hundred students, are unable to provide the needed services of this high-risk population. Elements of a counseling program for this population include:

1. individual counseling
2. group counseling and self-awareness activities
3. family intervention and parental training.

In describing a system that consciously provides for retaining potential dropouts, the model used for serving handicapped and disadvantaged students comes closest to the desired outcome. Federal mandates in Public Law 94-142 and the state's counterpart for educationally-handicapped students set the precedent by specifically stating the need for individual education programs (IEPs) for this high-risk population. A similar type document, the individual vocational education program (IVEP), can be found for the disadvantaged population in New Hampshire's vocational programs. Utilizing the same guidelines would also focus the necessary attention on a population that may need the same immediate attention. Previously cited research has indicated a disproportionate number of handicapped and disadvantaged discontinuing their vocational programs. Individual elements of an IEP would provide for flexibility, non-traditional approaches, and a guarantee of due process and confidentiality. For a potential dropout, examples of the type of content would include:

1. counseling services (type, time, dates and method of evaluating services)
2. least restrictive alternatives (i.e., diversified occupations, special training for employment programs, and alternative school, on-the-job training, flex time scheduling, school age parent program, etc.)
3. competency-based curriculum in vocational coursework
4. testing and evaluation procedures
5. graduation requirements and modification
6. the degree to which academic-type courses will parallel vocational content
7. specific contracts made with students (i.e., to improve absenteeism, reduce suspension rate, homework completion, etc.).

IV. IN SEARCH OF THE PERFECT MODEL

OR

MODEL DEVELOPMENT FOR REDUCING SUMMER VOCATIONAL ATTRITION

One of the more fascinating parts of studying dropouts concerns itself with prediction. If we could read the "signs" right, maybe we could see the future. Needless to say, we could at least beat the weather bureau's record.

In the case of this study, knowing which students possess a high potential for dropping out could significantly influence: program development and modification, special supportive services, guidance organization and function, and numerous administrative practices. The data collected represents the kind of information an institution would need to know about itself, and its students, so that time, energy, and resources are not wasted or misdirected.

One of the common problems people have about building models is the theoretical aspect. Often times, complex variables and abstractions tend to overwhelm the senses. In a review of the literature, specifically targeting student attrition, one study in particular, by Bean,* provided a synthesis or anthology of previous theoretical models. Previous models tend to borrow on behavioral science just as much as on reported studies in student attrition.

According to Bean, several prominent models are strongly rooted in the work of Durkheim, who pioneered theoretical models to explain why people commit suicide. Dropping out of school could, as it is theorized, be

*Bean, John P., The Synthesis of a Theoretical Model of Student Attrition, ERIC, ED 202444.

analogous to committing "social suicide." Some of the conclusions drawn from the study help construct the dominate variables that would lead an individual to make this "fatal" decision. Durkheim states, "Suicide varies inversely with the degree of integration of the social group which the individual forms a part." This could mean integration (but only in a moderate sense) into varied groups: religious, domestic, political, and in our case, youth organizations, sports, music, strong family support and/or friendship support. Spady, another model builder, who developed the first theoretical model of the dropout process, calls this "shared group values."

Durkheim offers another element into the model of suicide by stating that when social regulation was very high, the importance of the individual declined, and the sense of alienation increased, possibly leading to suicide. When social regulation was extremely low, passions were unchecked, and again the likelihood of suicide increased. The analogy for student attrition is that as regulations increase, personal freedoms decrease, and the student becomes disillusioned with the process (like being treated like a computer card), and withdraws from the system. At the other extreme, when regulation is quite low, discipline breaks down, and the student, uncontrolled by the institution, withdraws from it. The student may also think that when regulation is low, the institution doesn't care about the students, and drops out.

Spady and Tinto selectively borrowed Durkheim's idea that shared group values and friendship support are expected to reduce suicide, and by analogy, dropping out. In Spady's model, shared group values, grade performance, normative congruence, and friendship support were expected to lead to increased social integration. Social integration increased satisfaction, which increased institutional committment. Institutional committment in turn reduced the likelihood of dropping out.

Spady introduces the ever dominant (and nebulous) ingredient of background characteristics, specifically: family background, academic potential, ability, and socioeconomic status. Echoing the importance of background variables is a study from the Bureau of Guidance* at the State Education Department of New York, where most background variables are labelled as predictors beyond the control of the school; these include: health, father's occupation, parents' educational level, number of children in family, school to school transfer, parents' attitude toward graduation and the stability of the family unit.

CAUTION! [It may be worth noting that "model builders" in the study of dropouts in education concentrate on post-secondary dropouts. A literature review of models developed for the secondary level student turned up blank.]

The work of Sewell and Hauser address the notion of educational attainment. In their study, educational attainment refers to the total number of years of post-secondary schooling a student completes. The eleven variables expected to influence a college student's educational attainment are: father's education, mother's education, father's occupation, parental income, mental ability, high school grades, teachers' encouragement, parental encouragement, friends' plans, college plans, and occupational aspirations. According to the empirical studies, the best predictor of educational attainment was college plans, followed by high school grades. In the opinion of Bean, status attainment studies, by ignoring the interaction of a student with an institution, fail to address the question of why students drop out. (Again, we are looking at a post-secondary study.)

*Bureau of Guidance, New York State Education Department, How High Schools Can Reduce Their Dropout Rate, Albany, N.Y., 1964.

Using a different set of circumstances and setting, Price constructed a model of turnover in work organizations that runs surprisingly similar to previous educational and behavioral models. Turnover in the work place may be generalizable to student attrition, since both students and employees are members of an organization that allow for leaving. Price developed a model of turnover which includes six independent variables: pay, having close friends, participating in decision making, the repetitiveness of work, knowledge of the work role, and being treated fairly. All of these variables were expected to influence job satisfaction and increased satisfaction with one's work was expected to reduce turnover. Although logical, empirical evidence by Bean, for the relationship between satisfaction and dropout (or turnover), is not consistently high.

The model presented by the author, Bean, is a synthesis of models previously reviewed. The intent of this model is to predict the likelihood of a student dropping out of a post-secondary program. The synthetic model identifies four classes of variables: background, organizational, environmental, and attitudinal and outcome.

In the opinion of the author, all of these variables have direct or indirect effects on intent to leave, which is the immediate precursor of dropping out.

Background variables: attributes or characteristics of students prior to entering college. These variables preceed the student's interaction with the organization. The most important of these variables is probably performance (high school grades and standardized test scores).

Organizational variables: these are variables that are indicators of the student's interaction in the organization. This class of variables reflects the student's objective experiences in the organization (e.g. the number of

close friends, the amount of informal contact with faculty, the amount of help an advisor gives in specified areas, memberships in campus organizations, etc.).

Environmental variables: the environmental variables are identified as opposites of the organizational variables or variables over which the organization has little or no control. Examples include: opportunities to transfer or get a job, family approval of the institution and the student's major, family responsibilities, the likelihood of marrying, the difficulty of financing school, military draft, etc.

Attitudinal and outcome variables: these variables are ment to indicate more subjective evaluations of one's education, educational institution, and goals. These variables include assessments of the practical value of one's education, the psychological results of interacting in an organization, the institution's quality, one's own self-development, the satisfaction and boredom one feels at school, confidence in being a successful student, adjustment to the institution, loyalty to the institution, major and occupational certainty, educational goals, and absenteeism.

Appropriate or not, this particular study on vocational summer dropouts adopted the synthetic model developed by Bean to categorize the survey questions administered to the vocational dropout. The "jury of experts" categorized the questions under the headings of:

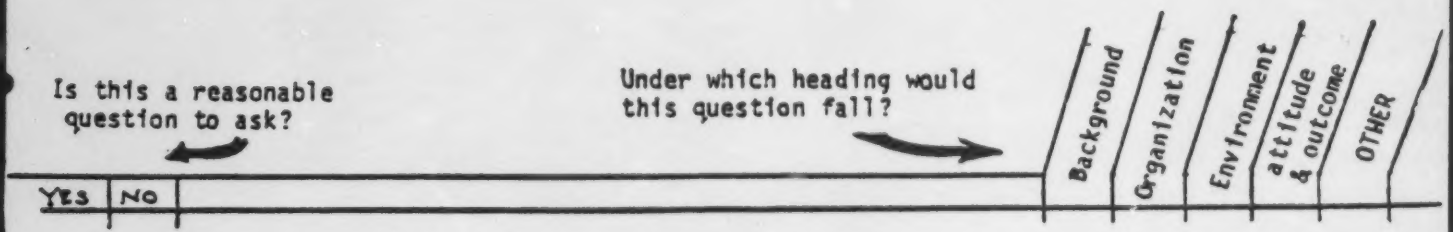
- organizational
- background
- attitudinal and outcome

The data collected from the students interviewed will be used to develop a more appropriate version of a model that will hopefully present variables associated in summer attrition. The functional equivalent of a model is a predictive instrument that could be administered early in the student's

high school or junior high school experience to denote high-risk students. The instrument should not be viewed as an exclusionary device. Students identified as high-risk could, if deemed appropriate by local support teams, receive special support assistance to reduce the chances of dropping out.

V. INSTRUMENT DEVELOPMENT FROM MODEL DESIGN

As a result of the literature review in the area of models to reduce attrition, we chose The Synthesis of a Theoretical Model of Student Attrition by John P. Bean as a reasonable and practical approach to be used as the theoretical model for this study of vocational program leavers. Under the four headings of background variables, organization variables, environmental variables, and attitudinal and outcome variables, our staff developed and cross-referenced potential questions which responded to the objectives of the contract of this study. These questions (95 in all) were distributed to twenty (20) experts in secondary and vocational education for review and selection of the appropriate questions to be asked during the students' interviews.



In order for a question to be included in the actual interview of students who left vocational programs, a seventy-five percent (75%) agreement had to be achieved in each of the following categories: (1) agreement by the category; (2) the appropriateness of the question; and (3) the quality of the wording. Each question was worded so as to be open-ended. Thereby a forced choice could limit or restrict the interviewees' response. However, for ease of coding, we atempted to categorize responses which could be anticipated. Furthermore,

adequate space was provided for the interviewers to record responses. The panel of experts identified sixty-five (65) questions which met the specified criteria. The staff reworded several appropriate questions, based upon the responses of the panel of experts. The panel grouped all usable questions into three categories rather than the suggested four; environmental variables was the category which was eliminated.

Upon completion of the instrument, a 1022 computer data file was created to accept interview data. This 1022 computer program allows for easy entering of data and descriptors while at the same time s compatable with the Statistical Package for the Social Sciences (SPSS). SPSS is the statistical computer program which was utilized to analyze the interview data.

While the computer programs were being developed, arrangements for interviews at the five volunteer vocational centers were being initiated. A total of one hundred and forty-four (144) students were identified by the New Hampshire State Department of Education, Division of Vocational-Technical Education. This data was reported by vocational directors through the Management Information Systems (MIS) of the Division of Vocational-Technical Education.

The survey and results of the interviews will be covered in a following section.

VI. RESULTS OF INTERVIEWS WITH VOCATIONAL PROGRAM LEAVERS

This section will describe the results of the students interviewed who completed the first year of a vocational program, enrolled in the next sequential course of the vocational program, and then for some reason did not participate in the second year course after summer was over.

Status of student follow-up to survey population

18 students are still enrolled in the vocational program or graduated from high school

32 students are enrolled in a new vocational program

59 students are enrolled in academic programs only

28 students have left school

4 students have moved

1 student is deceased

1 student got married

1 student joined the military

From a total population of 144 students (N=144)

35% of the students surveyed are enrolled in vocational programs

41% of the students surveyed are enrolled in only academic programs

19% of the students surveyed have left school

3% of the students surveyed have moved

1% of the students surveyed are deceased

1% of the students surveyed are married

1% of the students surveyed are in the military

After accounting for the "status" of the students, personal interviews were conducted at vocational centers and home high schools. If students were unable to be reached, they were then interviewed by telephone to increase the survey validity. Ninety-seven (97) students were interviewed or sixty-seven percent (67%) of the available population. Of these, seventy-five (75) students, twenty-two (22) students were still enrolled in the original vocational program or had graduated from high school. Ninety-four percent (94%) of the students interviewed are still enrolled in a high school curriculum. Of this ninety-four percent:

53% of the students are enrolled in only academic programs

41% of the students are enrolled in <u>new</u> vocational programs

6% of the students interviewed are no longer in school.

The next step in the review of the data is to examine the results of the interview data. Caution needs to be taken when interpreting this information because of the small number of eligible respondents (N=75). Each question is presented to the reader for his perusal. The information is presented in percentage format with the exception of questions 30, 40, 45, and 64. Each of these questions was answered separately using a computer program 1022. This allowed the interviewer to ask open-ended questions and yet record all student responses verbatim. On the following pages are the results by aggregate of the interviews and their responses to our questions.

KEY

VOC. REGION 9_____

1. Voc. Program:_____ 68 Traditional 6 Nontraditional by sex
_____Number of students in class

2. Age: _____

3. Sex: ___Male ___Female

---

4. What is your current education/employment status:
53% In school in an academic program
41% In school in another vocational program
3% Out of school unemployed
3% Out of school employed

---

5. Did you use vocational guidance services prior to leaving the voc. program?
28%Yes
70.7%No

---

6. Have any of your brothers or sisters taken vocational education?
40% Yes
57.3%No

---

7. Have any of your brothers or sisters dropped out of vocational education?
10.7%es
60% No 29% no response

---

8. Were you ever suspended from school?
34.7%es
62.7%No

---

9. How would you grade your overall school performance based upon report card grades?
4% A 44% B 48% C 4% D 0% F

---

10. What average grade did you receive in your vocational courses?
24% A 25% B 48% C 1.3% D 1.3% F

---

11. Did you ever have an individual educational plan written for you in school? (IEP)
6.7% Yes
93.3% No

---

12. Did you ever have have an individual vocational educational plan written for you in school? (IVEP)
8% Yes
92% No

---

13. Did you seek guidance before leaving the vocational program?

45% Yes

52% No

---

14. If yes, who did you see?

4.8% Vocational teacher

14.3% Vocational guidance

71.4% School counselor

4.8% Vocational director

4.8% Parents

___ Other_____

---

15. What was the result of the guidance you sought?

___ No help

___ More unanswered questions

___ A sound decision on your choice to leave

___ A decision was made by someone other than you to leave the program

___ Other_____

---

16. What similar vocational experiences did you have prior to enrolling in the vocational program?

8% 4-H

12% Summer work

18% I.A.

9% Home economics

7% Business education

---

17. What were the reason(s) for dropping out of your vocational program? (Rank in order of most to least important if more than one reason)

3% Poor facilities

10% Poor teacher

3% Parental influence

3% Peer influence

2% Transportation

15% New vocational interest

7% Gained all the skills needed

3% Discipline problem

9% Could not do work in class

14% Change in career goal

7% New opportunities in school

19% Other_____

---

18. How often were you absent from the vocational program?

13.3% Once a week

22.7% Once a month

9.3% Frequently

52% Never missed

---

19. Do you feel that you successfully completed the vocational program?

84% Yes

14.7% No

---

20. If yes, why?

62.7% Got a good grade

16% Not too challenging

5.3% Got a job in related area

---

21. If no, why?

4% Too hard
3% Poor teacher
4% Text too hard
___Tests too difficult

89% no response

---

22. How did your parents feel about your not completing the second year of the vocational program?

11.8% They were disappointed
18.8% They were relieved
22.4% They were involved in the decision
2.4% They were contacted by the school
3.5% They weren't contacted by the school
41.2% They weren't involved in the decision

---

23. Was the ride to the vocational center a problem in your vocational program?

10% Yes
85.3% No

---

24. Did you leave the vocational program because of a new decision about your career?

41.3% Yes
50.7% No

---

25. If you have dropped out of school entirely, are you pursuing any additional education?

3% Yes
10% No

86% no response - still in school

---

26. If yes, what?

1% GED
1% Abandon
___Enrolled in a CETA program
___Taking evening courses at night other than GED

97% no response

---

27. Were you involved in any youth organizations, clubs, or sports during your vocational program?

56% Yes
44% No

---

28. If yes, which one?

___FBLA
___HERO
___DECA
___VICA
___HOSA
___FFA
___Other_____

None

---

29. When you entered the program, was what you did different from what you thought you would do?

49.3% Yes
46.7% No

---

30. If yes, in what way was it different?_____

---

31. What reasons caused you to enroll in the vocational program?

39% Job opportunities
9.8% Friends
7.3% Word of mouth
22% Pre-vocational experience
12.2% Counseling
9.8% Visit to vocational center
___ Talked with vocational teacher

---

32. What are your feelings concerning the people who teach the vocational program?

18% Fair
18% Friendly
7% Sensitive to my needs
18% Knowledgeable about program
10% Dedicated
8% Enthusiastic
3% Insensitive
1.4% Cold, business-like
1.4% Preoccupied
5% High standards
5% Demanding
1.4% Other_____

---

33. What did you like about the vocational program?

13% Products produced
16% Friends made
14% Teaching style of teacher
13% Equipment
1% Youth groups
12% Relates to career objectives
11% Feeling of success
15.4% Other_____

---

34. What did you dislike about the program?

21% Teachers
4% Students
7% Text difficult to read
7% The time offered
31.8% Other_____
4% Poor facilities
7% Material too hard
9% Time spent traveling to program
6% Vocational project not my choice

---

35. If you could change the vocational program to better meet your needs, what would you change?

17% The time offered
10% Distance traveled
4% Quality of the facilities
4% Day visit to the program
5% Classes too long
___ Other_____
1% Opportunity to participate in first choice
7% Better information about the program
18.6% Quality of instructors
8.6% Opportunity to "try on" program beforehand
8.6% Classes too short

---

36. What did you gain as a result of participating in the vocational program?

30% Skills
14.8% Friends
9.2% Information to make a better decision on an occupation
24.6% Knowledge in an occupational area
14.8% Gained experience and awareness to help make new goals
6.3% Other_____

---

37. Would you consider re-entering a vocational program?

70.7% Yes
24% No

---

38. What type of vocational program would you like to enroll in?_____

39. Have you been involved in any formal training program since leaving the vocational program?

28% Yes
65.3% No

40. If yes, what's the name of the training program?_____

41. What is your opinion as to the purpose of vocational education?

73% Prepare for a job
12% Explore career opportunities
8% Become aware of career opportunities

42. How would you rate the vocational program's quality of:

The instructor	30% Excellent	45% Good	15% Fair	6.3% Poor
The equipment	___ Excellent	___ Good	___ Fair	___ Poor
Instructional methods	___ Excellent	___ Good	___ Fair	___ Poor
Individual concern for your success	___ Excellent	___ Good	___ Fair	___ Poor

43. Did you get along with the students in the class?

96% Yes
2.7% No

44. Were you interested in the class work?

77.3% Yes
20% No

45. If no, why? 6.7% boring

46. How was the vocational material presented?

Demonstration	14.5%	Audio-vidual	8.3%
Lecture	27.3%		
Hands-on	30%		
Worksheets	20%		

47. Could you read the class material?

85.3% Yes
13.3% No

48. What are your present career goals?

24% A job
28% 4 year College
16% Don't know
20% Vocational college
8% Armed Service

49. Were you given a written description of the two-year vocational program before you enrolled?

53.3% Yes
42.7% No

50. Was there a written description of the vocational courses in which you were enrolled?

68% Yes
25% No

---

51. Were you physically able to do all the things required in the vocational course?

96% Yes
2.7% No

---

52. Do you feel you were treated fairly in your vocational program?

86.7% Yes
12% No

---

53. Do you feel sorry you left the vocational program?

41.3% Yes
49.3% No

---

54. Were you told about anyone at the vocational center as a person who could help you with questions or problems?

48% Yes
49.3% No

---

55. How often did you meet with this person?_____

---

56. Did you discuss with this person that you were leaving the program?

18.7% Yes
29.3% No

---

57. Were there any rules which were used for your admission into the vocational program?

38.7% Yes
60% No

---

58. Did you find the work you did in the vocational program?

69.6% Challenging
5.4% Too hard
25% Just right
___ Easy
___ Boring
___ Repetitive

---

59. At the beginning of the vocational program in which you were enrolled in did you understand and discuss the following:

a. This course is the first in a series of courses? ___Yes ___No
b. The occupational opportunities available if you graduate from this program? ___Yes ___No
c. The opportunities to work part-time in an area for which you are being trained? ___Yes ___No

---

60. Did you think that your particular vocational program would be of any useful value to you?

84% Yes
14.7% No

---

61. Did you feel you would have any opportunity to improve yourself in the vocational program?

86.7% Yes
10.7% No

---

62. Were you satisfied with the education/training you received in the vocational program?

80% Yes
17.3% No

---

63. Did you feel that you were capable of doing the work which was asked of you while you were enrolled in the vocational program?

94.7% Yes
4% No

---

64. What opportunities did the vocational center provide to help you adjust to the vocational program?_____

---

65. Did you make any new friends in the vocational program?

88% Yes
10.7% No

Q10: HOW WAS THE VOCATIONAL PROGRAM DIFFERENT FROM EXPECTED?

VOCATIONAL DROPOUT SURVEY
June 7, 1982

NUMBER	RESPONSES IN REGION	VOCATIONAL REGION	VOCATIONAL PROGRAM	STUDENT RESPONSE
1	1	BERLIN		BORING
2	2	BERLIN	BUILDING TRADES	MORE CLASS TIME
3	3	BERLIN	OFFICE OCCUPATIONS	EXPECTATOINS
4	4	BERLIN	HEALTH OCCUPATIONS	WAS WITH "OLD" POPLE
5	5	BERLIN	DIVERSIFIED OCCUP	CHALLENGING
6	6	BERLIN	DIVERSIFIED OCCUP	NOT WHAT EXPECTED
7	7	BERLIN	DIVERSIFIED OCCUP	NOT PROPER PROGRAM
8	8	BERLIN	DIVERSIFIED OCCUP	EQUIPMENT WAS "REAL"
9	9	BERLIN	GRAPHICS	MORE HANDSON WORK
10	1	EXETER	DISTRIBUTIVE ED	WORKED ON HOUSE
11	2	EXETER	DISTRIBUTIVE ED	EXPETED MORE
12	3	EXETER	BUILDING TRADES	BETTER THAN EXPECTED
13	4	EXETER	DRAFTING	POOR TEACHER
14	5	EXETER	DRAFTING	NOT MATERIAL WANTED
15	6	EXETER	ELECTRICAL	BETTER THAN EXPECTED
16	7	EXETER	OFFICE OCCUPATIONS	MORE DIFFICULT
17	1	KEENE	AG MECHANICS	EXPECTED LG. ENGINES
18	2	KEENE	AG MECHANICS	MORE HANDSON
19	3	KEENE	AG MECHANICS	NOT STRUCTURED
20	4	KEENE	AG MECHANICS	MORE ENGINE WORK
21	5	KEENE	AG MECHANICS	TOO MANY BOOKS
22	6	KEENE	DISTRIBUTIVE ED	MORE SPECIFIC
23	7	KEENE	BUILDING TRADES	BUILDING HOUSE
24	8	KEENE	BUILDING TRADES	HOUSE
25	9	KEENE	FOOD SERVICES	NOT RUN WELL
26	10	KEENE	MACHINE SHOP	MORE INTENSE
27	11	KEENE	OFFICE OCCUPATIONS	MORE HANDS-ON
28	12	KEENE	CLOTHING	WANTED MORE SEWING
29	13	KEENE	COMMUNITY	MORE TECHNICAL
30	14	KEENE	COMMUNITY	MORE WRITING
31	15	KEENE	COMMUNITY	ALOT MORE ACTIVITIES
32	1	SOMERSWORTH	OFFICE OCCUPATIONS	NOT WHAT WANTED

Q38: WHAT TYPE OF VOCATIONAL PROGRAM WOULD YOU LIKE TO ENROLL IN?

VOCATIONAL DROPOUT SURVEY
June 7, 1982

NUMBER	RESPONSES IN REGION	VOCATIONAL REGION	VOCATIONAL PROGRAM	STUDENT RESPONSE
1	1	BERLIN		PRINTING
2	2	BERLIN	NATURAL RESOURCES	FORESTRY
3	3	BERLIN	CHILD SERVICES	HAIRDRESSING
4	4	BERLIN	BUILDING TRADES	DRAFTING
5	5	BERLIN	BUILDING TRADES	ELECTRONICS
6	6	BERLIN	OFFICE OCCUPATIONS	OFFICE MANAGEMENT
7	7	BERLIN	HEALTH OCCUPATIONS	HEALTH OCC.
8	8	BERLIN	HEALTH OCCUPATIONS	CHILD CARE
9	9	BERLIN	AUTO	BUILD. TRADES
10	10	BERLIN	DIVERSIFIED OCCUP	WELDING
11	11	BERLIN	DIVERSIFIED OCCUP	WELDING
12	12	BERLIN	DIVERSIFIED OCCUP	WELDING
13	13	BERLIN	WELDING	MACHINE SHOP
14	14	BERLIN	WELDING	WELDING
15	15	BERLIN	GRAPHICS	COMPUTERS
16	1	EXETER	AG MECHANICS	MECHANIC
17	2	EXETER	DISTRIBUTIVE ED	DISTRIBUTIVE ED.
18	3	EXETER	DISTRIBUTIVE ED	BUILDING TRADES
19	4	EXETER	BUILDING TRADES	MACHINE SHOP
20	5	EXETER	BUILDING TRADES	BUILDING TRADES
21	6	EXETER	DRAFTING	DISTRIBUTIVE ED
22	7	EXETER	ELECTRICAL	NATURAL RESOURCES
23	8	EXETER	FOOD SERVICES	DRAFTING
24	9	EXETER	OFFICE OCCUPATIONS	BUSINESS MACHINES
25	10	EXETER	OFFICE OCCUPATIONS	BUSINESS MACHINES
26	1	KEENE	AG MECHANICS	ELECTRONICS
27	2	KEENE	AG MECHANICS	ELECTRONICS
28	3	KEENE	AG MECHANICS	BUILDING TRADES
29	4	KEENE	AG MECHANICS	AUTO MECHANICS
30	5	KEENE	AG MECHANICS	BUILDING TRADES
31	6	KEENE	AG MECHANICS	BOOKKEEPING
32	7	KEENE	AG MECHANICS	COMMUNICATIONS
33	8	KEENE	AG MECHANICS	COMMUNICATIONS
34	9	KEENE	DISTRIBUTIVE ED	AUTO TECH.
35	10	KEENE	BUILDING TRADES	COMMUNICATIONS
36	11	KEENE	FOOD SERVICES	FOOD SERVIE
37	12	KEENE	MACHINE SHOP	BUILDING TRADES
38	13	KEENE	OFFICE OCCUPATIONS	AUTO MECH.
39	14	KEENE	OFFICE OCCUPATIONS	BUILDING TRADES
40	15	KEENE	OFFICE OCCUPATIONS	COMMUNICATIONS
41	16	KEENE	CLOTHING	CLOTHING
42	17	KEENE	COMMUNITY	FOODS
43	18	KEENE	COMMUNITY	OFFICE OCCUPATIONS
44	1	PLYMOUTH	DISTRIBUTIVE ED	DE 2
45	2	PLYMOUTH	DISTRIBUTIVE ED	HEALTH
46	3	PLYMOUTH	OFFICE OCCUPATIONS	DE/CHILDCARE/SHRTHND
47	4	PLYMOUTH	OFFICE OCCUPATIONS	SHORTHAND
48	1	SOMERSWORTH	DISTRIBUTIVE ED	COMPUTER
49	2	SOMERSWORTH	BUILDING TRADES	BLD. TRADES
50	3	SOMERSWORTH	OFFICE OCCUPATIONS	SEWING
51	4	SOMERSWORTH	OFFICE OCCUPATIONS	COSMOTOLOGY
52	5	SOMERSWORTH	OFFICE OCCUPATIONS	COMPUTERS
53	6	SOMERSWORTH	OFFICE OCCUPATIONS	OFFICE PROCEDURES
54	7	SOMERSWORTH	OFFICE OCCUPATIONS	BUILDING TRADES
55	8	SOMERSWORTH	OFFICE OCCUPATIONS	TYPING
56	9	SOMERSWORTH	OFFICE OCCUPATIONS	STENO

Q40: WHAT IS THE NAME OF THE FORMAL TRAINING PROGRAM YOU'RE ENROLLED IN?

VOCATIONAL DROPOUT SURVEY
June 7, 1982

NUMBER	RESPONSES IN REGION	VOCATIONAL REGION	VOCATIONAL PROGRAM	STUDENT RESPONSE
1	1	BERLIN	BUILDING TRADES	WORK EXPERIENCCE
2	2	BERLIN	OFFICE OCCUPATIONS	ON JOB TRAINING
3	3	BERLIN	HEALTH OCCUPATIONS	NURSING
4	4	BERLIN	DIVERSIFIED OCCUP	WELDING
5	1	EXETER	DISTRIBUTIVE ED	DISTRIBUTIVE ED.
6	2	EXETER	DRAFTING	DISTRIBUTIVE ED
7	3	EXETER	OFFICE OCCUPATIONS	BUSINESS MACHINES
8	1	KEENE	AG MECHANICS	ELECCTRONIS
9	2	KEENE	AG MECHANICS	KITCHEN WORK
10	3	KEENE	DISTRIBUTIVE ED	JUNIOR ACHIEVEMENT
11	4	KEENE	BUILDING TRADES	WIRING COMPUTERS
12	5	KEENE	MACHINE SHOP	CETA
13	6	KEENE	MACHINE SHOP	COOP MACHINE TRADES
14	7	KEENE	OFFICE OCCUPATIONS	ON JOB TRAINING
15	1	SOMERSWORTH	OFFICE OCCUPATIONS	OFFICE PROCEDURES
16	2	SOMERSWORTH	OFFICE OCCUPATIONS	OFFICE PROC
17	3	SOMERSWORTH	OFFICE OCCUPATIONS	BOOKKEEPING
18	4	SOMERSWORTH	OFFICE OCCUPATIONS	OFFICE PROCEDURES
19	5	SOMERSWORTH	OFFICE OCCUPATIONS	COMPUTERS
20	6	SOMERSWORTH	OFFICE OCCUPATIONS	FATHERS BUSINESS

Q45: WHY WEREN'T YOU INTERESTED IN CASS WORK?

VOCATIONAL DROPOUT SURVEY
June 7, 1982

NUMBER	RESPONSES IN REGION	VOCATIONAL REGION	VOCATIONAL PROGRAM	STUDENT RESPONSE
1	1	BERLIN	OFFICE OCCUPATIONS	REPETITIVE
2	2	BERLIN	AUTO	BORING
3	3	BERLIN	DIVERSIFIED OCCUP	NOT INTERESTING
4	1	EXETER	DISTRIBUTIVE ED	BORING
5	2	EXETER	DISTRIBUTIVE ED	NOT MATERIAL WANTED
6	3	EXETER	DRAFTING	TOO DIFFIULT
7	1	KEENE	AG MECHANICS	DIDN'T LIKE COUDRSE
8	2	KEENE	AG MECHANICS	BORING
9	3	KEENE	AG MECHANICS	BORING
10	4	KEENE	AG MECHANICS	LITTLE HANDS-ON
11	5	KEENE	BUILDING TRADES	BORING
12	1	SOMERSWORTH	OFFICE OCCUPATIONS	DISLIKED SUBJECT
13	2	SOMERSWORTH	OFFICE OCCUPATIONS	UNINTERESTING

Q64: WHAT OPPORTUNITIES DID THE CENTER PROVIDE TO HELP YOU ADJUST TO THE VOCATIONAL PROGRAM?

VOCATIONAL DROPOUT SURVEY
June 7, 1982

NUMBER	RESPONSES IN REGION	VOCATIONAL REGION	VOCATIONAL PROGRAM	STUDENT RESPONSE
1	1	BERLIN	NATURAL RESOURCES	NONE
2	2	BERLIN	CHILD SERIVCES	ABLE TO OBSERVE
3	3	BERLIN	BUILDING TRADES	NONE
4	4	BERLIN	BUILDING TRADES	INDIVIDUAL ASSIST.
5	5	BERLIN	BUILDING TRADES	NO PROBLEMS
6	6	BERLIN	OFFICE OCCUPATIONS	PERSONAL HELP
7	7	BERLIN	OFFICE OCCUPATIONS	TEACHER AVAILABLE
8	8	BERLIN	HEALTH OCCUPATIONS	NONE
9	9	BERLIN	AUTO	HANDS ON
10	10	BERLIN	DIVERSIFIED OCCUP	TAUGHT SUFFICIENCY
11	11	BERLIN	DIVERSIFIED OCCUP	NONE
12	12	BERLIN	DIVERSIFIED OCCUP	SPECIAL NEEDS COOR.
13	13	BERLIN	WELDING	NONE NEEDED
14	14	BERLIN	WELDING	NONE
15	15	BERLIN	GRAPHICS	NONE
16	1	EXETER	DISTRIBUTIVE ED	FRIENDLY
17	2	EXETER	BUILDING TRADES	TEAHER
18	3	EXETER	ELECTRICAL	INFO ABOUT ENTER
19	1	KEENE	AG MECHANICS	SAFETY
20	2	KEENE	AG MECHANICS	NONE
21	3	KEENE	AG MECHANICS	NONE
22	4	KEENE	AG MECHANICS	ACCEPTED FEMALES
23	5	KEENE	AG MECHANICS	NONE
24	6	KEENE	AG MECHANICS	NONE
25	7	KEENE	DISTRIBUTIVE ED	NONE
26	8	KEENE	CHILD SERIVCES	STUDENT GROUPS
27	9	KEENE	BUILDING TRADES	VISITATION
28	10	KEENE	BUILDING TRADES	ORIENTATION
29	11	KEENE	BUILDING TRADES	OTHER STUDENTS
30	12	KEENE	BUILDING TRADES	NONE
31	13	KEENE	FOOD SERVICES	HAND OUTS
32	14	KEENE	FOOD SERVICES	AIDES
33	15	KEENE	MACHINE SHOP	TOUR
34	16	KEENE	MACHINE SHOP	OVERVIEW
35	17	KEENE	OFFICE OCCUPATIONS	NONE
36	18	KEENE	OFFICE OCCUPATIONS	TIME ON TERMINAL
37	19	KEENE	OFFICE OCCUPATIONS	ORIENTATION
38	20	KEENE	CLOTHING	TALK TO COUNSELORS
39	21	KEENE	COMMUNITY	NONE
40	22	KEENE	COMMUNITY	NONE
41	23	KEENE	COMMUNITY	VISITS
42	24	KEENE	COMMUNITY	VISIT
43	1	SOMERSWORTH	DISTRIBUTIVE ED	ON-JOB-TRAINING
44	2	SOMERSWORTH	OFFICE OCCUPATIONS	WORK GROUPS
45	3	SOMERSWORTH	OFFICE OCCUPATIONS	PERSONAL COUNSELING
46	4	SOMERSWORTH	OFFICE OCCUPATIONS	PERSONAL HELP

VII. DISCUSSION CONCERNING THE RESULTS OF THE INTERVIEWS OF EARLY VOCATIONAL PROGRAM LEAVERS

Once the data was collected and analyzed, a group of twenty experts in vocational education were invited to a one-day workshop to review the findings and develop some tentative models that would be used to reduce attrition in the following year. This method would lend credability to the report because the assumptions, activities, and outcomes rest with a group to solve the attrition problem rather than leaving the decision up to the contracting agency.

The following information will describe:

- the types of models investigated
- the agenda to achieve model development and review survey data
- the worksheet used to solicit input
- the compilation of work generated to reduce attrition through models A, B, and C
- an evaluation of the workshop.

Accompanying this report to the funding agency is a computer tape which includes the 1022 program and the statistical analysis procedures used (Statistical Package for the Social Sciences), to run a variety of frequency and cross-tabulation analyses based upon the results of the interviews.

The goals of this workshop are to develop three (3) models which can be implemented next year in voluntary sites to reduce attrition between school years among vocational students.

The models will be developed in the following three areas:

Model A: A summer program for students who have completed the first year of a vocational program and intend to continue on in the second year of the vocational program (but who may be considering dropping the second year of the program).

Model B: An informational and experiential program for 9th or 10th grade students who have or are considering enrolling in a vocational program.

Model C: The construction and testing of an instrument designed for early identification of students who would drop out of vocational programs.

Profile Development Associates Model-Building Workshop
to Reduce Attrition Between School Years
Among Vocational Students

8:30-9:00 Registration - Coffee - New England Center Lobby

9:00 Welcome and Overview - Dr. Gregory D. Gill

9:10 1st Session - What did we find as a result of our interviews?

A. Why did we ask those questions?
-The model we used to develop the questionnaire.
-The clustering of the questions.

B. What did the interviewees say?
-Reasons for leaving the vocational program.
-Comparison of sending students and home high school students.

10:00 2nd Session - Grouping by interest in model development.

A. What does data say about our model?

B. What do we need to know to design a successful model?
-Ingredients necessary for a successful model.
-Introduction to the case study.

11:45-1:00 Lunch

1:00 Re-charge - To Build A Model
-Have you as a group come to some common assumptions?
-Has a discrepancy been identified between the current status and the goals of our model?
-How do you propose that we design activities to bring the current status closer to the completion of the goals of the model?

2:30-2:55 A Report to the Group from the Model-Building Groups

3:00 Evaluation and Adjournment*

*Recreation passes available

Workshop Invitation List

Mr. John P. Avery, Plymouth Area High School, Plymouth

Mr. Scott Hendricks, Plymouth Area High School, Plymouth

Mr. Brian Beeler, Somersworth High School, Somersworth

Ms. Pam Richard, Somersworth High School, Somersworth

Dr. William Dunton, Berlin Senior High School, Berlin

Ms. Justina Hale, Berlin Senior High School, Berlin

Mr. Langdon Plumer, Exeter High School, Exeter

Ms. Judith Smith, Exeter High School, Exeter

Mr. Sam Bruno, Exeter High School, Exeter

Mr. Landon Reynolds, Cheshire Vocational Center, Keene

Mr. Jim Huntley, Cheshire Vocational Center, Keene

Dr. Roger Crim, RCU Director, Division of Vocational-Technical Education, Concord

Mr. Richard Montieth, Exemplary Consultant, Division of Vocational-Technical Education, Concord,

Mr. Stephen Lichtenstein, Instructor, University of New Hampshire, Durham

Model: A B C Title_____
(Circle one)

ASSUMPTIONS

	ACTIVITIES

Participants:

VITIES	OUTCOMES

MODEL A

ASSUMPTIONS	ACTIVITIES	OUTCOMES
1. Number of dropouts because of conflicts in: time offerings of voc. programs instructors are important factors information about program sequences new voc. interest/career goal counseling suspension students are exploring application process. 2. Transportation not a problem. 3. Pleased with skill training. 4. Successful grades. 5. Consider re-entry. 6. Program useful. 7. Make new friends. 8. Nice people in the voc. program.	1. Contact during summer months (letter & call). 2. Possible summer observation to job sites. 3. Shorter programs, individual transportation, flexible schedules. 4. Job placement or job search by coop. 5. Career information from teachers, coop coordinator or guidance counselor. 6. Parent involvement in withdrawal process. 7. More product oriented activities. 8. Book work. 9. Shadowing people in career fields. 10. Improved communication between employers and administration.	1. Fewer students leaving after one year. 2. More flexible schedules for students. 3. Better written description of courses; for second year of programs. 4. Better student evaluation techniques. 5. Improved guidance services for students. 6. Improved parent interaction. 7. Students know results of the programs. 8. Improved communication of expectations. 9. Understanding of what program "is." 10. Career exploration service. 11. Staff development to improve instruction 12. Time utilization while in class. 13. Moving out of a program is O.K.

Model B

ASSUMPTIONS	ACTIVITIES	OUTCOMES
1. Students have chosen a definite career goal and voc. ed. will enable them to reach this goal. 2. Students are aware of the scope of the program enrolled. 3. Students are aware of the time commitment to the class. 4. Students expect all hands-on work (no class work). 5. Students feel they will be fully trained in voc. area upon completion of program. 6. Students realize they need background ed. and realize they need academic ed. along with voc. programs. 7. Students are aware of voc. programs and what they have to offer. 8. Parents are concerned and offer guidance as to career goal and voc. ed. 9. Students possess basic reading and writing skills and other skills needed. 10. Students will seekout guidance services from professionals. 11. Students realize they cannot participate in certain home school activities. 12. If going to college, they cannot take part in a voc. program. 13. Students realize stigma of what voc. students are. 14. Students realize the changes they must adjust to if they are from a sending school. 15. Faculty and guidance realize and are knowledgeable of the importance of voc. ed.	7th and 8th grades: 1. Career day--voc. teacher presents slide show and talk. 2. Follow-up conference with teacher. 3. NH Occupational Interest Survey. 9th grade: 1. Visit to voc. class and spend time in voc. class. 2. Meet with counselor to plan academic class and voc. class. 3. Pre-voc. courses. 4. Identify handicapped and disadvantaged (IVEP). 10th grade: 1. Spend time in a voc. class. 2. Peer counseling with certain students in class. 3. Pre-voc. classes. 4. Meet with students, parents, counselor, and teachers. 5. Meet with graduates from voc. program now working in field. Overall: 1. Educate academic faculty as to what voc. ed. is. 2. Newsletter to sending schools. 3. Public relations by youth groups.	1. Students are aware of career opportunities from voc. ed. 2. Students are aware of scope, outcomes, and committment before entering program (handicapped, non-traditional). 3. Students realize the relationship between academics and voc. program. 4. Students have realization of their own aptitude in a voc. area. 5. Expanded information for parents. 6. Faculty and guidance should have more knowledge of voc. programs. 7. Peer support groups. 8. Active youth organizations. 9. Include craft committee members in orientation. 10. Summer follow-up. 11. Career ed. in curriculum starting in pre-voc. 12. A better job identifying students as handicapped or disadvantaged--earlier assessment.

Model C

ASSUMPTIONS	ACTIVITIES	OUTCOMES
1. Student abilities to match course expectations (or appropriate modifications made). 2. Student has had no (or erratic) exposure to career education. 3. Does not get involved in school services and youth organizations. 4. Students from sending schools are higher risk. 5. Students identified as H/D are higher risk (higher, if from sending schools). 6. Student has lost identity to home school or carry label of outcast. 7. Potential dropout may have a history of suspension. 8. Potential dropout is indecisive about career direction. 9. Does not use guidance services or seek parent advice. 10. Counseling unavailable on an individual and regular basis. 11. The kid that is failing is unhappy. 12. Students are not involved in an individual plan (H/D). 13. High self-criticism (non-competitive with others). 14. Second and third voc. choices are not viable options. 15. Students need faculty/staff relationships. 16. General absenteeism is higher with potential dropouts.	1. Youth organization members should describe course expectations to new course members (function of leadership & training). 2. Comprehensive career education (K+); utilize students from higher grades to work with younger kids; and career plan with parent involvement. 3. Give more options; better PR for youth organization; overcoming youth organ. stereotypes; organizations meet during school times; and the organ. should be more civic minded. 4. Establish satellite special services in sending schools; earlier involvement in program reduces stigma; and expand options through better transportation and scheduling. 5. IEP/IVEP with specific information on how to reduce potential attrition; use modifications to promote success. 6. Yearbook from voc. center incorporated into school yearbook with course descriptions; and extracurricular activities open to sending schools - with late buses. 7. Increase modification to academics; in-house suspension; reading and math in content area; suspension is NOT appropriate consequence - but a group decision (peers and advisor). 8. Interest inventories with appropriate tie-in with voc. programs and academics; values clarification; and a guidance run program. 9. Change role of counselors to be more social worker; more counselors with smaller student load; parental information groups (support); and career plan in parents.	1. Fewer dropouts. 2. Student remaining in original career choice. 3. Expressed student satisfaction with the program. 4. Higher percentage employed in related areas.

Model C (continued)

ASSUMPTIONS	ACTIVITIES	OUTCOMES
	10. Peer support groups; decrease counselor load; alternative sources: teachers as case managers. 11. Self-concept development in all courses will set-up for success rather than failure. 12. Destroy all red pencils; grade on a positive basis; use open entry-open exit. 13. Involve students - student sign off. 14. Counseling builds on success. 15. Flexibility in expanding apprenticeship programs; flexibility in transportation; provide year-round programming (day & night, too); community-based programs sponsored by industry; and community-owned services within schools. 16. Training to enhance faculty skills; case manager program; in-school big brother/big sister program; screen staff with the students; form teacher support groups. 17. Isolate reasons for high absenteeism; in-house social worker present; closer monitoring employed; and encourage attendance through contracting.	

Profile Development Associates
Evaluation

Please respond to each of the following questions:

1. I would rate this workshop overall, as being:
   33% Extremely useful
   22% Very useful
   44% Useful
   ___ Not very useful
   ___ A waste of time

2. Identify one to three things which you liked best about this workshop:
   Interaction with members from other schools and gaining information and knowledge from them; role playing.
   Working in small groups; great mixture of backgrounds/jobs of people involved; kept moving--no time for boredom; invited new ideas--not just rehashing of things everyone knows.
   Sharing; creating; seeking solutions.
   Written agenda; setting; building a plan model.
   Small group brainstorming with specific objectives and guidelines for achieving these objectives; fruit and wine; participants.
   Development of the outcomes.
   Wine, apples, and grapes; small group activities.
   Excellent sessions.
   Informal; got some things on paper; small size; wine and fruit lunch appreciated.

3. Identify one to three things which you liked least about this workshop:
   Time went too fast!
   Time is tight this time of year.
   Could have been done in a half day; did not adhere to time frames.
   Role-playing.
   Model playing.
   At times felt we could have been a bit more task oriented.

Comments:
   The most worthwhile workshop I've participated in this year--we actually worked, rather than just listened!
   Enjoyed PM snack and paper edges.
   Good workshop!
   Very valuable experience.
   Very useful if activities are implemented.

VIII. RECOMMENDATIONS AND CONCLUSIONS

This section will list and state in sentence form rather than narrative the following recommendations:

- A larger number of vocational students who have left vocational programs need to be interviewed to strengthen the validity of the interviews.
- A larger number of vocational students who have left vocational programs need to be interviewed to attempt to clarify the reasons why students leave vocational programs.
- The three models developed by New Hampshire vocational educators to reduce attrition (among potential vocational students and new vocational students) should be implemented.
- The implementation of the three models should be evaluated by process and product to determine the impacat of these models on high school students.

This section will list the conclusions. However, the firmness of the conclusions rests on six percent (6%) of the actual number of students who left vocational programs in 1981. Therefore, it is concluded that:

- A larger percentage of disadvantaged and handicapped students leave vocational programs than regular vocational students.
- The sample size needs to be increased to place validity and reliability in the interview instrument.
- The national review of the literature is silent on why students leave school over the summer.

At this point, conclusions should be withheld because no intervention has been initiated.

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